

## 4.14 UTILITIES AND SERVICE SYSTEMS

This chapter describes the existing utilities and service systems in the Specific Plan Area and evaluates the potential environmental consequences of future development that could occur by adopting and implementing the proposed Specific Plan Update, and approval and development of the proposed Transit-Oriented Developments (TOD) #1 and #2 (together referred to as the “proposed Project”).

Water supply, wastewater, solid waste and energy conservation are each addressed in a separate section of this chapter. Stormwater as it relates to both water quality and capacity is addressed in Chapter 4.9, Hydrology and Water Quality, of this Draft EIR under Impact HYDRO-4. In each section, a summary of the relevant regulatory settings and existing conditions is followed by a discussion of impacts and cumulative impacts from the implementation of the Specific Plan Update.

### 4.14.1 WATER SUPPLY

This section outlines the regulatory setting, describes existing conditions, and discusses potential impacts from buildout of the Specific Plan Update and development of the proposed Project.

The analysis in this section is based in part on the *City of Millbrae Water Supply Assessment* (WSA) prepared for the City of Millbrae by GHD dated June 2015. The WSA is included in Appendix I, Utilities Data, of this Draft EIR.

#### 4.14.1.1 ENVIRONMENTAL SETTING

##### Regulatory Framework

###### *Federal Regulations*

###### Federal Safe Drinking Water Act

The Safe Drinking Water Act authorizes the United States Environmental Protection Agency (US EPA) to set national standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally-occurring and man-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the Division of Drinking Water (DDW) within the State Water Resources Control Board (SWRCB) regulates public drinking water systems. If a water system does not meet standards, it is the water supplier’s responsibility to notify its customers.

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### *State Regulations*

#### California Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), which was passed in California in 1969, the SWRCB has the ultimate authority over State water rights and water quality policy. Porter-Cologne also establishes nine Regional Water Quality Control Boards (RWQCBs) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater.<sup>1</sup> Millbrae is overseen by the San Francisco Bay RWQCB.

#### California Urban Water Management Planning Act

Through the Urban Water Management Planning Act of 1983, the California Water Code requires all urban water suppliers within California to prepare and adopt an Urban Water Management Plan (UWMP) and update it every five years. This requirement applies to all suppliers providing water to more than 3,000 customers or supplying more than 3,000 acre-feet of water per year (AFY).<sup>2</sup> This Act is intended to support conservation and efficient use of urban water supplies. The Act requires that total project water use be compared to water supply sources over the next 20 years in five-year increments, that planning occur for single and multiple dry water years, and that plans include a water recycling analysis that incorporates a description of the wastewater collection and treatment system within the agency's service area along with current and potential recycled water uses<sup>3</sup>.

#### Senate Bills 610 and 221

Senate Bill (SB) 610 and SB 221 amended State law to ensure better coordination between local water supply and land use decisions and confirm that there is an adequate water supply for new development. Both statutes require that detailed information regarding water availability be provided to City and County decision-makers prior to approval of large development projects. SB 610 requires the preparation of a WSA for certain types of projects, as defined by Water Code Section 10912, which are subject to the California Environmental Quality Act (CEQA).

Projects required to prepare a WSA are defined as follows:

- Residential development of more than 500 dwelling units
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor area
- Hotel or motel, or both, having more than 500 rooms
- Industrial, manufacturing or processing plant, or industrial park planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area
- Mixed-use project that includes one or more of the projects specified above

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<sup>1</sup> California Wetlands Information System, Summary of the Porter-Cologne Water Quality Control Act, [http://ceres.ca.gov/wetlands/permitting/Porter\\_summary.html](http://ceres.ca.gov/wetlands/permitting/Porter_summary.html), accessed on February 5, 2015.

<sup>2</sup> One acre-foot is the amount of water required to cover 1 acre of ground (43,560 square feet) to a depth of 1-foot.

<sup>3</sup> Department of Water Resources, About Urban Water Management, <http://www.water.ca.gov/urbanwatermanagement/>, accessed on February 5, 2015.

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- Project that would demand an amount of water equivalent to, or greater than, the amount of water required for 500 dwelling units

SB 221 establishes consultation and analysis requirements related to water supply planning for residential subdivisions including more than 500 dwelling units. Written verification by the water supplier that sufficient water is available for the project is required before construction begins. The document used to determine compliance with both SB 610 and SB 221 is the UWMP.

### California Groundwater Management Act of 1992

The Groundwater Management Act (Assembly Bill (AB) 3030) was signed into law in 1992 and provides guidance for applicable local agencies to develop voluntary Groundwater Management Plans (GMP) in State-designated groundwater basins. GMPs can allow agencies to raise revenue to pay for measures influencing the management of the basin, including extraction, recharge, conveyance, facilities' maintenance, and water quality.<sup>4</sup> The Groundwater Management Act and has since been modified by Senate Bill 1938 in 2002 and Assembly Bill 359 in 2011.

### Sustainable Groundwater Management Act of 2014

On September 16, 2014, a three-bill legislative package was signed into law, composed of AB 1739, SB 1168, and SB 1319, collectively known as the Sustainable Groundwater Management Act.<sup>5</sup> The Governor's signing message states "a central feature of these bills is the recognition that groundwater management in California is best accomplished locally".

### The Water Conservation Act of 2009 (SB X7-7)<sup>6</sup>

SB X7-7, which was enacted in 2009, requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water by 20 percent by 2020, with an interim goal of a 10 percent reduction in per capita water use by 2015.

### State Updated Model Water Efficient Landscape Ordinance (AB 1881 [2006])<sup>7</sup>

The updated Model Water Efficient Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by January 31, 2010 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance (MO). See Millbrae Municipal Code below for a discussion of local ordinances that are required to reduce water consumption and conserve water.

<sup>4</sup> Department of Water Resources Planning and Local Assistance Central District, Groundwater, *Groundwater Management*, <http://www.cd.water.ca.gov/groundwater/gwab3030.cfm>, accessed on February 5, 2015.

<sup>5</sup> Department of Water Resources, Groundwater Information Center, [http://www.water.ca.gov/groundwater/groundwater\\_management/legislation.cfm](http://www.water.ca.gov/groundwater/groundwater_management/legislation.cfm), accessed on February 5, 2015.

<sup>6</sup> Department of Water Resources, Senate Bill SBX7-7 2009 Information, <http://www.water.ca.gov/wateruseefficiency/sb7/>, accessed on February 5, 2015.

<sup>7</sup> Department of Water Resources, Water Efficient Landscape Ordinance, <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>, accessed February 5, 2015.

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### State Mandated Water Reductions

On April 1, 2015, as a result of severe drought conditions in California, the Governor issued an executive order directing the SWRCB to implement mandatory water reductions in cities and towns across California to reduce water usage by 8 percent to 36 percent. The water reductions vary depending on per capita water usage in each municipality and are based on the water usage for a three month period in 2014 (July through September). Cities that use more water will have to make larger cuts. Millbrae will be subject to water reductions of 16 percent. The order also requires:

- Replacement of 50 million square feet of lawns throughout the State with drought tolerant landscaping
- Creation of a temporary, Statewide consumer rebate program to replace old appliances with more water and energy efficient models
- Requirement that campuses, golf courses, cemeteries, and other large landscapes make significant cuts to water use
- Prohibit new homes and development from irrigating with potable water unless water-efficient drip irrigation systems are used and ban the watering of ornamental grass on public street medians.

### CALGreen Building Code

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations [CCR]) to apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in this code, throughout the State of California. CALGreen established planning and design standards for sustainable site development including water conservation and requires new buildings to reduce water consumption by 20 percent.<sup>8</sup> The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011. The building efficiency standards are enforced through the local building permit process.

The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories:

- Planning and design
- Energy efficiency
- Water efficiency and conservation
- Material conservation and resource efficiency
- Environmental quality

The provisions of this code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in this code, throughout the State of California. Compliance with the CALGreen Code is not a substitution for meeting the certification requirements of any green building program. CALGreen requires new buildings to reduce water consumption by 20 percent.

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<sup>8</sup> The green building standards became mandatory in the 2010 edition of the code.

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### The California Plumbing Code

The 2010 California Plumbing Code (Part 5, Title 24, CCR) was adopted as part of the California Building Standards Code. The general purpose of the universal code is to prevent disorder in the industry as a result of widely divergent plumbing practices and the use of many different, often conflicting, plumbing codes by local jurisdictions. Among many topics covered in the code are water fixtures, potable and non-potable water systems, and recycled water systems. Water supply and distribution shall comply with all applicable provisions of the current edition of the California Plumbing Code.

### *Local Regulations*

#### Millbrae 1998-2015 General Plan

The City of Millbrae General Plan outlines various goals, policies, and implementing programs relevant to water supply and conservation in the Land Use Element. The policies relevant to the proposed Project are listed in Table 4.14-1.

TABLE 4.14-1 GENERAL PLAN POLICIES RELEVANT TO WATER SUPPLY AND CONSERVATION

Number	Policy
<b>Land Use (LU) Element</b>	
LU5.1	<b>Adequacy of Public Infrastructure and Services.</b> Ensure that new and existing developments can be adequately served by municipal services and "facilities in accordance with City standards. New projects which require construction or expansion of public improvements shall pay their fair share of the costs necessary to improve or expand infrastructure to serve them, including street improvements, parks, water storage tanks, sewer and water service, and other public services.
LU5.4	<b>Capital Improvement Program (CIP).</b> Continue to maintain a multi-year Capital Improvement Program (CIP) supporting policies in the General Plan to maintain, improve or expand Citywide facilities and infrastructure.
LU5.5	<b>Adequate Utility Infrastructure.</b> Provide safe, reliable, and adequate utility infrastructure to meet the City's new and existing needs and to comply with applicable state, regional, and federal regulations, including: (1) water supply for existing and new normal and emergency needs; (2) sanitary sewer collection; (3) wastewater treatment and disposal; and (4) stormwater collection as necessary to provide adequate drainage and flood protection during periods of high rain and high tides.
LU5.6	<b>Recycled Water.</b> Consider the use of high quality recycled water for parks and private landscaping uses.
LU5.7	<b>Water Conservation Techniques.</b> Promote the use of low-water-use and fire suppression landscaping and other water conservation measures.
LUIP-23	<b>Assessment and Determination of Existing Utility Infrastructure Capacity.</b> Complete the study of existing utility infrastructure for water distribution, sanitary sewer collection, wastewater treatment and disposal, and storm water collection, including the following steps: Assess existing system; develop design criteria; consider projects new loads from planned redevelopment; define required improvements; and prioritize improvements.
LUIP-24	<b>Utility Infrastructure Improvements.</b> Implement utility improvements for water distribution, sanitary sewer collection, wastewater treatment and disposal, use of recycled water, and storm water collection.

Source: City of Millbrae General Plan 1998-2015, adopted 1998.

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### Millbrae Municipal Code

The City of Millbrae Municipal Code contains all ordinances for the city. The Municipal Code is organized by Title, Chapter, and Section. The current Municipal Code is up to date through Ordinance 747, passed May 27, 2014. The following provisions of Title 6, Sanitation and Health, Title 8, Public Works, and Title 9, Building Regulations, of the Municipal Code help to minimize adverse effects to water supply as a result of development in Millbrae:

- **Chapter 6.20 Municipal Services.** The purpose of this chapter is to regulate the provision of municipal services, including collection of garbage and rubbish, and water and sewer services
- **Chapter 8.05 Water Service.** This chapter is known as Millbrae's "Water Service Ordinance." It provides rules and regulations for the construction and use of water service or water system, including installation, alteration and repair of such facilities within or connecting to the city's water service or system.
- **Chapter 8.10 Backflow and Cross-Connection Control Program.** The purpose of this chapter is to protect the public potable water supply of the city of Millbrae from the possibility of contamination or pollution due to backflow or cross-connection.
- **Chapter 8.45 Water Conservation.** This chapter outlines the policies, regulations, prohibitions and restrictions regarding the use of water for all customers in the city. It sets out water use and conservation goals by implementing the City's Urban Water Management Plan. Pursuant to the Water Conservation in Landscaping Act, the "model" water efficient landscape ordinance adopted by the Department of Water Resources is enforceable within the city.
- **Chapter 9.60 Indoor Water Use Efficiency.** The purpose of the Indoor Water Use Efficiency Regulation is to enhance public health and welfare by encouraging water conservation measures in the design, construction, and maintenance of buildings. The water use efficiency practices referenced in this section are intended to encourage the conservation of natural resources, increase water efficiency and lower water costs.

## Existing Conditions

This section describes water supply sources, water supply infrastructure, water treatment facilities, as well as projected demand and supply.

### *Water Supply Sources and Infrastructure*

#### San Francisco Public Utilities Commission - Surface Water Supply via Wholesale Purchase

Millbrae obtains all of its water through a contract with the San Francisco Public Utilities Commission (SFPUC). This water is delivered from the City and County of San Francisco's Regional Water System (RWS), operated by the SFPUC. SFPUC's supply is predominantly from the Sierra Nevada, delivered from the Hetch Hetchy Reservoir through the Hetch Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties.

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The water originating from Hetch Hetchy Reservoir is protected in pipes and tunnels as it is conveyed to the Bay Area, and requires pH adjustment<sup>9</sup> to control pipeline corrosion and disinfection for bacteria control. Based on the SFPUC's disinfection treatment practice, extensive bacteriological quality monitoring, and high operational standards, the U.S. Environmental Protection Agency (USEPA) and the State of California Department of Public Health (DPH) have determined that the Hetch Hetchy water source meets federal and State drinking water quality requirements without filtration, and thus the SFPUC is not required to filter water from Hetch Hetchy Reservoir.<sup>10</sup>

Two reservoirs, Crystal Springs and San Andreas, collect runoff from the San Mateo Creek watershed. Water delivered from the RWS in excess of the Peninsula System and San Francisco demands also is diverted into Crystal Springs and San Andreas Reservoirs. The SFPUC's Harry Tracy Water Treatment Plant (HTWTP; San Bruno, California) filters and disinfects water supplied from Crystal Springs and San Andreas Reservoirs before it is delivered to the Peninsula customers. As part of SFPUC's Water Supply Improvement Program<sup>11</sup> (WSIP), the HTWTP is nearing completion of major upgrades, including construction of a new 11 million gallon Treated Water Reservoir (TWR). The new TWR is expected to begin serving wholesale customers in March 2015.

The SFPUC and the City (and the other wholesale customers) entered into a Water Supply Agreement (WSA) in July 2009. The 2009 WSA addresses the rate-making methodology used by SFPUC in setting wholesale water rates for its wholesale customers, in addition to addressing water supply and water shortages for the system. The WSA has a 25-year term. Millbrae's Individual Supply Guarantee (ISG) is 3.15 MGD; this is its share of the 184 MGD allocated for the Bay Area Water Supply and Conservation Agency<sup>12</sup> (BAWSCA) members.

The *Water Shortage Allocation Plan* between the SFPUC and its wholesale customers, adopted as part of the WSA, addresses shortages of up to 20 percent of system-wide use. The *Tier 1 Water Shortage Plan* allocates water from the RWS between San Francisco Retail and the wholesale customers during system-wide shortages of 20 percent or less. The WSA also includes a *Tier 2 Water Shortage Plan*, which would allocate the available water from the SFPUC system among the wholesale customers. In August 2010, the BAWSCA agencies reached agreement on a new *Tier 2 Water Shortage Plan* to recommend to their respective governing bodies.

As of early April 2011, all the BAWSCA agencies have approved the new *Tier 2 Water Shortage Plan*. The new *Tier 2 Water Shortage Plan* provides the framework for allocating the wholesale Tier 1 water allocation between the different BAWSCA agencies. The new *Tier 2 Water Shortage Plan* is in effect until 2018. The SFPUC approved a water delivery limitation from the SFPUC system of 265 MGD until 2018, when it adopted the *Water Supply Improvement Program* (WSIP) and certified the Programmatic Environmental Impact Report (PEIR) on October 30, 2008. This 265 MGD Interim Supply Limitation (ISL) for the system allocated 184 MGD to the BAWSCA

<sup>9</sup> pH is the measure of acidity/alkalinity.

<sup>10</sup> SFPUC, 2011. 2010 Urban Water Management Plan, for the City and County of San Francisco, prepared by SFPUC, June 2011.

<sup>11</sup> The \$4.8 Billion WSIP is composed of 83 projects to upgrade, repair and replace water infrastructure associated with SFPUC's RWS, stretching from the central valley to the San Francisco peninsula. Currently at 80 percent complete, a key goal of WSIP is to provide improvements related to water supply/drought protection. To date WSIP has repaired or replaced more than 280 miles of pipeline.

<sup>12</sup> The Bay Area Water Supply and Conservation Agency represents the interests of 24 cities and water districts, and two private utilities, that purchase water wholesale from the San Francisco regional water system, <http://bawasca.org/>.

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agencies and 81 MGD to San Francisco. The ISL does not impact the seismic, public health and deliverability level of service goals that were identified in the WSIP. The intent of the ISL was to establish an interim water supply planning horizon that defers decisions on long term water supply issues until after 2018, when more current information will be available. The penalty mechanism in the ISL, which provides for a substantial “Environmental Enhancement Surcharge,” is only triggered if the SFPUC and the BAWSCA agencies collectively exceed the 265 MGD limitation.

In December 2010, the SFPUC finalized the distribution of the 184 MGD BAWSCA ISL allocation to the individual BAWSCA members. Millbrae’s Interim Supply Allocation (ISA) is 3.13 MGD. The City adopted its 2010 UWMP on June 14, 2011, by Resolution No. 11-17.<sup>13</sup> Section 4 of the 2010 UWMP includes updated demand projections. Based on these projections, the City does not anticipate exceeding the 3.13 MGD ISA during the ISL period ending in 2018.

The ISA is distinct from the ISG. The ISG is a perpetual entitlement for water delivered from the SFPUC system that survives the expiration of the current water delivery contract. The ISA is an interim water delivery limitation intended to accomplish the goals outlined in the adopted WSIP, and it automatically expires in 2018 (per SFPUC Resolution 10-0213, adopted 12/14/2010).

### Regional Coordination of Water Conservation, Supply and Recycling Activities

BAWSCA was created on May 27, 2003 to represent the interests of 26 cities and water districts, and two private utilities, in Alameda, Santa Clara and San Mateo counties that purchase water on a wholesale basis from the San Francisco Regional Water System. BAWSCA directly represents the needs of the cities, water districts and private utilities that depend on the regional water system. BAWSCA provides these customers with an ability to work with SFPUC on an equal basis to ensure reliable operation of the regional system and collectively and efficiently meet local responsibilities. BAWSCA has the mandate to coordinate water conservation, supply and recycling activities for its agencies; acquire water and make it available to other agencies on a wholesale basis; finance projects, including improvements to the regional water system; and build facilities jointly with other local public agencies or on its own to carry out the agency’s purposes.

As a member of BAWSCA, the City is formally represented on the BAWSCA Board of Directors on matters involving decision-making, policy setting and issues of interest to the BAWSCA members.

BAWSCA’s water management objective is to ensure that a reliable, high quality supply of water is available where and when people within the BAWSCA service area need it. A reliable supply of water is required to support the health, safety, employment, and economic opportunities of the existing and expected future residents in the BAWSCA service area and to supply water to the agencies, businesses, and organizations that serve those communities.

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<sup>13</sup> Consistent with the Urban Water Management Act, the UWMP must be updated every five years; accordingly, the City is in the process of updating their 2010 UWMP.

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BAWSCA is developing the Long-Term Reliable Water Supply Strategy (Strategy) to meet the projected water needs of its member agencies and their customers through 2035 and to increase their water supply reliability under normal and drought conditions. The Strategy is proceeding in three phases. Phase I was completed in 2010 and defined the magnitude of the water supply issue and the scope of work for the Strategy. Phase II of the Strategy resulted in a refined estimate of when, where, and how much additional supply reliability and new water supplies are needed throughout the BAWSCA service area through 2035, as well as a detailed analysis of the water supply management projects, and the development of the Strategy implementation plan. The Final (Phase III) Strategy report will incorporate the results of additional work and present the recommended Strategy and the associated Strategy implementation plan (i.e. who will do what by when). Phase III will include the implementation of specific water supply management projects. Depending on cost-effectiveness, as well as other considerations, the projects may be implemented by a single member agency, by a collection of the member agencies, or by BAWSCA in an appropriate timeframe to meet the identified needs. Project implementation will continue throughout the Strategy planning horizon, in coordination with the timing and magnitude of the supply need. The development and implementation of the Strategy will be coordinated with the BAWCSA member agencies and will be adaptively managed to ensure that the goals of the Strategy (i.e. increased normal and drought year reliability) are efficiently and cost-effectively being met.

### Infrastructure

The RWS operated by SFPUC consists of more than 280 miles of pipeline and 60 miles of tunnels, 11 reservoirs, 5 pump stations, and two water treatment plants, and comprises three regional water supply and conveyance systems: the Hetch Hetchy System, the Alameda System, and the Peninsula System. The Peninsula System includes conveyance facilities connecting to the San Francisco distribution system and to other SFPUC customers on the Peninsula, including Millbrae. SFPUC water enters the Millbrae water distribution system through five turnouts.

The Millbrae distribution system includes 11 pressure zones, 6 pumps (3 each at 2 stations), 5 storage tanks (only 4 are in operation; 1 is standby), 568 hydrants, and 69.7 miles of water mains. Storage tanks near the Harry Tracy WTP are filled early in the morning and are slowly drawn throughout the day to satisfy customer demand. Water filtered by the Harry Tracy Treatment Plant (San Andreas Reservoir) supplies water in the higher elevations, while the Crystal Springs supply lines #2 and #3 deliver water to the lower elevations<sup>14</sup>.

Water mains in the Specific Plan Area range from 6 to 12 inches in diameter, with a mix of materials such as asbestos-cement, cast iron, and PVC pipe. The Specific Plan Area is within the city's Pressure Zone #4. Tank storage has not yet been developed in this pressure zone due to the direct connection to the Hetch Hetchy transmission infrastructure through this area.

<sup>14</sup> BAWSCA, 2014. Bay Area Water Supply and Conservation Agency (BAWSCA), Annual Survey – FY 2012-13, summary for Millbrae; April 2014. [http://www.bawasca.org/docs/AgencyProfile\\_Millbrae.pdf](http://www.bawasca.org/docs/AgencyProfile_Millbrae.pdf)

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### Recycled Water

Recycled water is used by the City for non-potable uses, such as for in-house operations at the Water Pollution Control Plant (WPCP). Recycled water uses at the WPCP include hosing down the facility and clarifier, cleaning out tanks and bar screens, and dust control. The WPCP produces a limited amount of "restricted" use disinfected secondary recycled water. Disinfected secondary effluent is re-chlorinated and pumped to a 5,000 gallon polyethylene recycled storage tank. The present supply of restricted secondary recycled water use is 28 AFY.

The irrigation demand in Millbrae is currently supplied by potable water purchased from the SFPUC. The City has about 80 landscape customers, which consists of about 1 percent of the total customer accounts and 7 percent of the total demand. During the 2009-2010 fiscal year, total landscape irrigation demand was approximately 170 af.<sup>15</sup>

The Specific Plan Area includes the WPCP, located at the northeast corner of the intersection of Highway 101 and Millbrae Avenue. Delivery of recycled water to the Specific Plan Area would entail construction of a new "unrestricted" Title 22 tertiary recycled water system at the WPCP. Plans for construction of this system were not incorporated in the City's CIP and, in addition, funding for the system has not yet been secured. This improvement is not part of the proposed Project analyzed in this EIR.

In addition to local activities, the City participates in the regional recycled water planning, as a member of the Northern California Chapter of WaterReuse Association, which helps implement water recycling in California.

### *Projected Water Supply and Demand*

As previously stated, the 2010 UWMP is a long-range planning document used to assess current and projected water usage, water supply planning and conservation and recycling efforts. The 2010 UWMP includes a *Water Shortage Contingency Plan* (WSCP), described in Section 8 of the 2010 UWMP. Using the measures in the WSCP to reduce the demands to the required supply availability, the 2010 UWMP estimates that Millbrae will have adequate supplies to meet demands during normal, single-dry, and multiple-dry years throughout the 25-year planning period of the 2010 UWMP (i.e. through 2035).

Table 4.14-2 shows the existing and projected future water supply for the City and Table 4.14-3 shows the existing and projected water supply in normal, single dry and multiple dry years. As shown in Tables 4.14-2 and 4.14-3, while the 3.18 million gallons per day (MGD) water supply remains constant from 2015 through 2035, the water supply decreased by 0.76 MGD in a single dry year and by 1.07 MGD in multiple dry years.

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<sup>15</sup> Millbrae, 2011. 2010 Urban Water Management Plan, prepared by Kennedy Jenks, June 30, 2011.

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**TABLE 4.14-2 EXISTING AND PROJECTED WATER SUPPLY FOR MILLBRAE IN NORMAL YEARS**

Water Supply Sources	2015	2020	2025	2030	2035
SFPUC Water Contract	3,530	3,530	3,530	3,530	3,530
Groundwater	0	0	0	0	0
Other Water Transfers	0	0	0	0	0
Desalination	0	0	0	0	0
Recycled Water	28	28	28	28	28
<b>Total Supply (AFY)</b>	<b>3,558</b>	<b>3,558</b>	<b>3,558</b>	<b>3,558</b>	<b>3,558</b>
<b>Total Supply (MGD)</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>

Note: AFY = acre feet per year

Source: GHD, 2015. City of Millbrae Water Supply Assessment dated June 2015, Table 8.

**TABLE 4.14-3 EXISTING AND PROJECTED WATER SUPPLY IN NORMAL, SINGLE-DRY, AND MULTIPLE-DRY YEARS**

Source	Normal	Single-Dry Year	Multiple-Dry Year
SFPUC Water Contract	3,530	2,687	2,333
Recycled Water	28	28	28
<b>Total (AFY)</b>	<b>3,558</b>	<b>2,715</b>	<b>2,361</b>
<b>Total (MGD)</b>	<b>3.18</b>	<b>2.42</b>	<b>2.11</b>

Note: AFY = acre feet per year, MGD = million gallons per day

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* date June 2015, Table 14.

Table 4.14-4 provides the existing and projected water demand for Millbrae through year 2035 under existing conditions without the proposed Project. As shown in these tables there is an insufficient water supply under existing conditions in normal years through 2035 (i.e. 3,379 AFY demand compared to 3,558 AFY supply); however, there is an insufficient water supply during a single dry year (i.e. 3,379 MGD demand compared to 2,715 AFY supply) and multiple dry years (3,379 AFY demand compared to 2,361 AFY supply).

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TABLE 4.14-4 EXISTING AND PROJECTED WATER DEMAND FOR MILLBRAE WITHOUT THE PROPOSED PROJECT

Demand – Land Use	2005	2010	2015	2020	2025	2030	2035
Single Family Residential	1,459	1,294	1,525	1,551	1,624	1,689	1,755
Multi-Family Residential	410	384	452	460	481	501	520
Commercial	408	389	459	466	488	508	528
Industrial	0	0	0	0	0	0	0
Institutional/Government	90	102	120	122	127	133	138
Landscape	151	170	200	204	213	222	231
Agriculture	0	0	0	0	0	0	0
Other	424	22	4	4	4	5	5
Unaccounted Water	24	152	176	179	188	195	203
<b>Total Demand (AFY)</b>	<b>2,965</b>	<b>2,513</b>	<b>2,936</b>	<b>2,987</b>	<b>3,126</b>	<b>3,253</b>	<b>3,379</b>
<b>Total Demand (MGD)</b>	<b>2.65</b>	<b>2.24</b>	<b>2.62</b>	<b>2.67</b>	<b>2.79</b>	<b>2.90</b>	<b>3.02</b>

Note: AFY = acre feet per year, MGD = million gallons per day

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 9.

### Water Supply Reliability

Millbrae is reliant on SFPUC for its potable water supplies. The SFPUC has historically met demand in its service area in all year types from its watersheds, including the Tuolumne River, Alameda Creek, and the San Mateo County watersheds.<sup>16</sup> In general, 85 percent of the supply comes from the Tuolumne River through Hetch Hetchy Reservoir and the remaining 15 percent comes from local watersheds through the various reservoirs. As described in the 2010 UWMP for SFPUC, the Water Supply Improvement Program (WSIP) maintains this mix of water supply for all year types.

The WSIP includes many projects related to the SFPUC's RWS, to address both seismic reliability and overall system reliability. Currently, 80 percent of WSIP projects are complete. The following water supply projects are intended to meet dry-year demands, with no greater than 20 percent system-wide rationing in any one year:

- Restoration of Calaveras Reservoir capacity
- Restoration of Crystal Springs Reservoir capacity
- Westside Basin Groundwater Conjunctive use, and
- Water transfer with Modesto Irrigation District (MID)/Turlock Irrigation District (TID).

In addition to the existing and future improvements from the WSIP, San Francisco has already constructed the following system interties for use during catastrophic emergencies, short-term facility maintenance and upgrade

<sup>16</sup> GHD, *City of Millbrae Water Supply Assessment*. Dated June 2015.

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activities, and in times of water shortages: 1) a 40 MGD system intertie between the SFPUC and SCVWD (Milpitas Intertie); 2) a 35 MGD intertie with EBMUD allowing EBMUD to serve the City of Hayward's demand and/or supply the SFPUC directly (and vice versa); and, 3) one permanent and one temporary intertie to the South Bay Aqueduct, which would enable the SFPUC to receive State Water Project water.

The SFPUC has provided a projection of water supply reliability.<sup>17</sup> It presents the projected RWS supply under a range of hydrologic conditions and takes into account the impacts of climate change as SFPUC currently understands them. The reliability projections assume that wholesale customers purchase 184 MGD from the RWS through 2030 and that SFPUC implements the dry-year water supply projects included in the WSIP. The projections represent the wholesale share of available supply during historical water year types per the Tier One WSAP. The projections do not reflect any potential impact to RWS yield from the additional fishery flows required as part of the Calaveras Dam Replacement Project and the Lower Crystal Springs Dam Improvements Project.

SFPUC has translated these dry year projections into reductions to the total 184 MGD water supply available to its wholesale customers. SFPUC's projections indicate that a 10 percent system-wide reduction in supply will occur in a single dry year and up to a 28 percent system-wide reduction will occur in the second and third years of a multiple dry year scenario. Table 4.14-5 shows the anticipated reductions in service reliability that could be experienced by the city when wholesale supplies are reduced during single dry and multiple dry water years.

**TABLE 4.14-5 EXISTING AND PROJECTED WATER SUPPLY FOR SFPUC AND CITY OF MILLBRAE (AFY)**

Water Supply Sources	Normal Water Year Supply	Single Dry Year	Multiple Dry Years		
			Year 1	Year 2	Year 3
SFPUC to Customers	206,121	170,946	170,946	148,429	148,429
Percent of Normal Year	100%	83%	83%	72%	72%
City of Millbrae Supply	3,530	2,687	2,687	2,333	2,333
Percent of Normal Year	100%	76%	76%	66%	66%

Note: AFY = acre feet per year

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 6.

The adopted WSIP provides for a dry year water supply program that, when implemented, would result in system-wide rationing of no more than 20 percent of customer demand. The Programmatic Environmental Impact Report (PEIR)<sup>18</sup> for the WSIP identified the following drought shortages during the design drought: 3.5 out of 8.5 years at 10 percent rationing and 3 out of 8.5 years at 20 percent rationing.

If the SFPUC does not develop a supplemental water supply in dry years to offset the effects of fishery flows on water supply, rationing would increase during dry years. If the SFPUC experiences a drought between 2015 and 2018, in which rationing needs to be imposed, rationing would increase by approximately one percent in shortage years. Reduced flows for fisheries could require supply rationing to increase from 20 to 21 percent if the maximum

<sup>17</sup> Letter from P. Kehoe dated February 22, 2010. *Projected System Supply Reliability Based on Historical Hydrologic Period*.

<sup>18</sup> San Francisco Public Utilities Commission's Water System Improvement Program, Program Environmental Impact Report San Francisco Planning Department File No. 2005.0159E, State Clearinghouse No. 2005092026, certified October 2008.

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design drought occurs between 2015 and 2018. After 2018, completion of the WSIP would provide for system-wide supply rationing of no more than 20 percent. The SFPUC may be able to manage the water supply loss associated with fishery flows through the following actions:

- Development of additional conservation and recycling
- Development of additional groundwater supply
- Water transfers from MID or TID
- Increases in Tuolumne River supply
- Revising the Upper Alameda Creek Filter Gallery Project capacity
- Development of a desalination project.

In summary, the SFPUC has a projected shortfall of available water supply to meet its level of service goals and contractual obligations. However, the SFPUC has a stated commitment to supply its wholesale customers with 184 MGD and meet its delivery reliability goal of 265 MGD with no greater than 20 percent rationing in any one year of drought. Various activities have been implemented by the SFPUC to resolve this shortfall issue.

### 4.14.1.2 STANDARDS OF SIGNIFICANCE

The proposed Project would have a significant impact on water service if it would:

1. Have insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed.
2. Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

### 4.14.1.3 IMPACT DISCUSSION

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UTIL-1	<b>Sufficient water supplies would not be available to serve the proposed Project from existing entitlements and resources and new or expanded entitlements would be required.</b>
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As previously stated, a WSA was prepared for the proposed Project to determine the increase in water demand and assess the available water supply's ability to meet the demands of the proposed Project for normal, single dry, and multiple dry years with implementation of the proposed Project.<sup>19</sup> The buildup scenario would result in a net increase of 1,577,235 square feet of office space, 142,535 square feet of retail space, 1,440 new residential units, and 325 new hotel rooms. The portion of this development that was not accounted for in the City's 2010 UWMP and would create an additional water demand of 682 AFY or 0.14 MGD. The projected water demand for buildup of the proposed Project is summarized in Table 4.14-6.

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<sup>19</sup> GHD, 2015. *City of Millbrae Water Supply Assessment*. Dated June 2015.

## UTILITIES AND SERVICE SYSTEMS

TABLE 4.14-6 WATER DEMAND FOR PROPOSED PROJECT

Proposed Project	Projected Water Demand (AFY)	Projected Water Demand (GPD)	Projected Water Demand (MGD)
TOD #1	156	139,236	0.14
TOD #2	172	153,242	0.15
Remaining Specific Plan Area	354	315,868	0.32
<b>Total</b>	<b>682</b>	<b>608,435</b>	<b>0.60</b>

Note: AFY = acre feet per year, GPD = gallons per day, MGD = million gallons per day.

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 13.

## Specific Plan Update

### Normal Years

Tables 4.14-7 show the water supply and demand projections during normal years with buildout of the Specific Plan Update.

TABLE 4.14-7 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH SPECIFIC PLAN UPDATE IN NORMAL YEARS

Supply	2015	2020	2025	2030	2035
SFPUC Water Contract (AFY)	3,530	3,530	3,530	3,530	3,530
Recycled Water (AFY)	28	28	28	28	28
<b>Total Supply (AFY)</b>	<b>3,558</b>	<b>3,558</b>	<b>3,558</b>	<b>3,558</b>	<b>3,558</b>
Demand					
Demand Without Specific Plan Update (AFY)	2,376	2,427	2,566	2,693	2,819
Specific Plan Update Water Demand (AFY)	682	682	682	682	682
<b>Total Demand (AFY)</b>	<b>3,058</b>	<b>3,109</b>	<b>3,248</b>	<b>3,375</b>	<b>3,501</b>
<b>Surplus/Deficit (AFY)</b>	<b>500</b>	<b>449</b>	<b>310</b>	<b>183</b>	<b>57</b>

Note: AFY = acre feet per year

a. It should be noted that some components of the proposed Project were considered within the demands forecasted in the 2010 UWMP. In order to account for the proposed Project's demands that were already considered in the 2010 Urban Water Management Plan shown previously in Table 4.14-4, those existing Project demands of approximately 560 AFY or 0.50 MGD were deducted from the estimated demands without the projects (e.g., 2015 Normal: 2,936 – 560 = 2,376 AFY) throughout the planning horizon.

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 15.

## UTILITIES AND SERVICE SYSTEMS

As shown in Table 4.14-7, the City would have sufficient capacity to meet the water demands of the proposed Specific Plan Update in normal dry years through 2035. Therefore, impacts under normal years would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### *Single- and Multiple-Dry Years*

Tables 4.14-8 through Tables 4.14-9 show the water supply and demand projections during single-dry years and multiple-dry years with buildout of the Specific Plan Update.

**TABLE 4.14-8 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH SPECIFIC PLAN UPDATE IN SINGLE DRY YEARS**

	2015	2020	2025	2030	2035
<b>Supply</b>					
SFPUC Water Contract (AFY)	2,687	2,687	2,687	2,687	2,687
Recycled Water (AFY)	28	28	28	28	28
<b>Total Supply (AFY)</b>	<b>2,715</b>	<b>2,715</b>	<b>2,715</b>	<b>2,715</b>	<b>2,715</b>
<b>Demand</b>					
Demand Without Specific Plan Update <sup>a</sup> (AFY)	2,376	2,427	2,566	2,693	2,819
Specific Plan Update Water Demand (AFY)	682	682	682	682	682
<b>Total Demand (AFY)</b>	<b>3,058</b>	<b>3,109</b>	<b>3,248</b>	<b>3,375</b>	<b>3,501</b>
<b>Surplus/Deficit (AFY)</b>	<b>-348</b>	<b>-394</b>	<b>-533</b>	<b>-660</b>	<b>-786</b>

Note: AFY = acre feet per year

a. It should be noted that some components of the proposed Project were considered within the demands forecasted in the 2010 UWMP. In order to account for the proposed Project's demands that were already considered in the 2010 Urban Water Management Plan shown previously in Table 4.14-4, those existing Project demands of approximately 560 AFY or 0.50 MGD were deducted from the estimated demands without the projects (e.g., 2015 Normal: 2,936 – 560 = 2,376 AFY) throughout the planning horizon.

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 15, and page 22.

## UTILITIES AND SERVICE SYSTEMS

**TABLE 4.14-9 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH SPECIFIC PLAN UPDATE IN MULTIPLE-DRY YEARS**

Supply	2015	2020	2025	2030	2035
SFPUC Water Contract (AFY)	2,333	2,333	2,333	2,333	2,333
Recycled Water (AFY)	28	28	28	28	28
<b>Total Supply (AFY)</b>	<b>2,361</b>	<b>2,361</b>	<b>2,361</b>	<b>2,361</b>	<b>2,361</b>
<b>Demand</b>					
Demand Without Specific Plan Update <sup>a</sup> (AFY)	2,376	2,427	2,566	2,693	2,819
Specific Plan Update Water Demand (AFY)	682	682	682	682	682
<b>Total Demand (AFY)</b>	<b>3,058</b>	<b>3,109</b>	<b>3,248</b>	<b>3,375</b>	<b>3,501</b>
<b>Surplus/Deficit (AFY)</b>	<b>-697</b>	<b>-748</b>	<b>-887</b>	<b>-1,041</b>	<b>-1,140</b>

Note: AFY = acre feet per year

a. It should be noted that some components of the proposed Project were considered within the demands forecasted in the 2010 UWMP. In order to account for the proposed Project's demands that were already considered in the 2010 Urban Water Management Plan shown previously in Table 4.14-4, those existing Project demands of approximately 560 AFY or 0.50 MGD were deducted from the estimated demands without the projects (e.g., 2015 Normal: 2,936 – 560 = 2,376 AFY) throughout the planning horizon.

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* date June 2015, Table 15.

As shown in Tables 4.14-8 and 4.14-9, during critical dry and multiple-dry year events, when the SFPUC could impose 20 percent reductions in supply, implementation of the proposed Specific Plan Update would result in a water demand that would exceed the supply for all years.

The City could meet the water demand with the implementation of water conservation and water efficiency ordinances recently adopted by the City, including the Indoor Water Ordinance (Municipal Code 9.60), the Green Building Code Ordinance (Municipal Code 9.35), and the Water Efficient Landscape Ordinance (Municipal Code 8.45). The California plumbing code has instituted requirements for new construction that mandate the installation of ultra, low-flow toilets and low-flow showerheads. Residential, commercial, and industrial usage can be expected to decrease as a result of the implementation of more aggressive water conservation practices, including the active distribution of water saving devices, providing high efficiency toilets (HET) and high efficiency clothes washer (HEW) rebates. In addition, in the case of a water shortage, the City would implement the WSCP, as outlined in the 2010 UWMP.

Furthermore, as an infill development effort, the Specific Plan Update inherently furthers objectives of water conservation by redeveloping older less efficient buildings with new high efficiency buildings that meet CALGreen standards that reduce water consumption by 20 percent. In addition, the following Specific Plan Update Urban Design (UD), Open Space (OS), and Utilities and Public Services (UTIL) policies are intended to ensure water conservation is practiced in the Specific Plan Area:

- Urban Design Policy
  - P-UD 11. Ensure all landscaping plans conform with the City's Water Efficient Landscape Ordinance.

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- Open Space Policy
  - P-OS 5. Require open spaces and parks to incorporate sustainability measures, such as including native plant species, drought tolerant plants that require minimal irrigation, permeable paving, solar-powered lighting, and other similar features.
- Utilities and Public Services Policies
  - P-UTIL 3. Reduce water consumption through a program of water conservation measures.
  - P-UTIL 4. Encourage use of gray water where available.
  - P-UTIL 16. Require installation of infrastructure for “purple pipes” for future use of recycled water when available.
- Implementation Policies
  - P-IMP 4. Require all new development projects pay their fair share for any needed infrastructure improvements, including the pedestrian/bicycle path and pedestrian/bicycle overcrossing over Highway 101 north of the Millbrae Avenue overcrossing.
  - P-IMP 9. Complete a nexus study to apportion fair share costs of all necessary infrastructure in the Plan Area.

Specific Plan Update Policy UTIL-5 is intended to support the City’s future plans for the construction of a new “unrestricted” Title 22 tertiary recycled water system at the Millbrae WPCP to reduce potable water consumption, although, as discussed in Section 4.14.1.1 under subheading “Recycle Water,” the plans for the construction of this system were not incorporated in the City’s CIP and the funding for the system has not yet been secured.

Also, by the year 2030, the SFPUC’s WSIP projects are anticipated to be complete, which will likely increase the reliability of supplies within the city. The BAWSCA is also scheduled to have identified and completed projects as part of their long-term water supply strategy by 2018 that could increase the water supply.

While the compliance with Specific Plan Updates and implementation of the City’s WSCP, plus the addition of supplies developed through the BAWSCA’s long-term water supply strategy combined with the SFPUC’s WSIP improvements could reduce the water deficit, the insufficient water supply during dry years would result in a *significant* impact.

**Impact UTIL-SP-1:** With implementation of the proposed Specific Plan Update there would not be sufficient water supplies available to serve the proposed Project from existing entitlements and resources during multiple dry years.

**Mitigation Measure UTIL-SP-1:** Prior to approving future applications for development in the Specific Plan Area, the City shall require future project applicants to prepare and submit a written statement to the satisfaction of the City of Millbrae Community Development Department that clearly demonstrates how the project complies with the water conservation and water efficiency ordinances adopted by the City, including the Indoor Water Ordinance (Municipal Code 9.60), the Green Building Code Ordinance (Municipal Code

9.35), and the Water Efficient Landscape Ordinance (Municipal Code 8.45) and any other water conservation strategies that would be implemented by the project applicant.

**Significance With Mitigation:** Significant and Unavoidable. Supplemental water supply sources for the 2035 buildout year of the proposed Specific Plan Update would be identified and developed by SFPUC. As the 2010 UWMP is updated, supplemental water supply sources beyond 2035 (the planning horizon of the current 2010 UWMP) will be quantified through refined project developments in subsequent UWMPs (updated every five years). Therefore, additional water supplies that would mitigate this impact will be developed by SFPUC. Because SFPUC is the water service provider to the City and the entity that has the ability to mitigate this impact, and because the City does not have jurisdiction over the development of new water supplies, the City cannot guarantee that additional water supplies will be developed, so the impact is considered significant and unavoidable.

**Applicable Regulations:**

- The Water Conservation Act of 2009 (SB X7-7)
- 2010 California Plumbing Code that requires water conserving fixtures
- City of Millbrae Municipal Code: Chapter 8.05, Water Service; Chapter 8.45, Water Conservation; Chapter 9.60, Indoor Water Use Efficiency.
- City of Millbrae water supply and demand management strategies and drought management plans identified in the 2010 *Urban Water Management Plan* (UWMP).
- City of Millbrae General Plan – Adequacy of Public Infrastructure and Services, LU5.1; Capital Improvement Program (CIP), LU5.4; Adequate Utility Infrastructure, LU5.5; Water Conservation Techniques, LU5.7; Assessment and Determination of Existing Utility Infrastructure Capacity, LUIP-23; Utility Infrastructure Improvements, LUIP-24.

## TOD #1 Project

The WSA predicts the increase in water demand with implementation of the proposed TOD #1 project. The proposed TOD #1 project would result in a net increase of 270,000 square feet of office space, 32,000 square feet of retail space, and 500 new residential units. This would create an additional water demand of 156 AFY or 0.14 MGD.

### *Normal Years*

The projected water supply versus water demand for the proposed TOD #1 project under normal year conditions is provided in Table 4.18-10.

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TABLE 4.14-10 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH TOD #1 PROJECT DURING NORMAL YEARS

Normal Year	2015	2020	2025	2030	2035
<b>Total Supply (AFY)</b>	3,558	3,558	3,558	3,558	3,558
<b>Demand</b>					
Demand Without TOD #1 Project (AFY)	2,376	2,427	2,566	2,693	2,819
TOD #1 Project Water Demand (AFY)	156	156	156	156	156
<b>Total Demand (AFY)</b>	2,532	2,583	2,722	2,849	2,917
<b>Surplus/Deficit (AFY)</b>	1,026	975	836	709	641

Note: AFY = acre feet per year

Source: GHD, 2015. City of Millbrae WSA, Table 15.

As shown on Table 4.14-10, the WSA results show that there is sufficient water for the proposed TOD #1 project during normal years through the project's buildout year 2020 and the Specific Plan Update's buildout year 2035. Therefore, impacts under normal years would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### Single- and Multiple-Dry Years

The projected water supply versus water demand for the proposed TOD #1 project under single-dry year and multiple dry year conditions is provided in Tables 4.14-11 and 4.14-12.

TABLE 4.14-11 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH TOD #1 PROJECT DURING SINGLE-DRY YEARS

Single Dry Year	2015	2020	2025	2030	2035
<b>Total Supply (AFY)</b>	2,715	2,715	2,715	2,715	2,715
<b>Demand</b>					
Demand Without TOD #1 Project (AFY)	2,376	2,427	2,566	2,693	2,819
TOD #1 Project Water Demand (AFY)	156	156	156	156	156
<b>Total Demand (AFY)</b>	2,532	2,583	2,722	2,849	2,917
<b>Surplus/Deficit (AFY)</b>	183	132	-7	-134	-202

Note: AFY = acre feet per year

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 15.

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**TABLE 4.14-12 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH TOD #1 PROJECT DURING MULTIPLE-DRY YEARS**

Multiple Dry Years	2015	2020	2025	2030	2035
<b>Total Supply (AFY)</b>	<b>2,361</b>	<b>2,361</b>	<b>2,361</b>	<b>2,361</b>	<b>2,361</b>
<b>Demand</b>					
Demand Without TOD #1 Project	2,376	2,427	2,566	2,693	2,819
TOD #1 Project Water Demand	156	156	156	156	156
<b>Total Demand (AFY)</b>	<b>2,532</b>	<b>2,583</b>	<b>2,722</b>	<b>2,849</b>	<b>2,917</b>
<b>Surplus/Deficit</b>	<b>-171</b>	<b>-222</b>	<b>-361</b>	<b>-488</b>	<b>-556</b>

Note: AFY = acre feet per year

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 15.

As shown in Table 4.14-11, the WSA results show that there is sufficient water for buildout of the proposed TOD #1 project during single dry years until 2020. There will be a deficit of water starting in year 2025 for a single-dry year. As shown in Table 4.14-12, a deficit of water from 2015 through 2035 with multiple-dry years. As discussed previously in Section 4.14.1.1, Existing Conditions, the water demand would exceed water supply for multiple-dry years even without the proposed TOD #1 project.

As stated in the Specific Plan Update discussion above, the proposed TOD #1 project would be required to comply water conservation policies Specific Plan Update Policies UD 11, OS 5, IMP 4, IMP 9, UTIL-3, UTIL 4 and UTIL 16. Furthermore, water conservation and water efficiency measures would be implemented by the City to reduce the deficit, as well as implementation of the City's WSCP, the addition of supplies developed through the BAWSCA's long-term water supply strategy, and the SFPUC's WSIP improvements. However, the insufficient water supply during dry years would result in a *significant* impact.

**Impact UTIL-TOD#1-1:** Implementation of the proposed TOD #1 project would not have sufficient water supplies available to serve the project from existing entitlements and resources during multiple dry years.

**Mitigation Measure UTIL-TOD#1-1:** Prior to project approval, the project applicant shall prepare and submit a written statement to the satisfaction of the City of Millbrae Community Development Department that clearly demonstrates how the project complies with the water conservation and water efficiency ordinances adopted by the City, including the Indoor Water Ordinance (Municipal Code 9.60), the Green Building Code Ordinance (Municipal Code 9.35), and the Water Efficient Landscape Ordinance (Municipal Code 8.45) and any other water conservation strategies that would be implemented by the project applicant.

**Significance With Mitigation:** Significant and Unavoidable. Supplemental water supply sources for the 2020 buildout year of the proposed Specific Plan Update would be identified and developed by SFPUC. As the 2010 UWMP is updated, supplemental water supply sources beyond 2035 (the planning horizon of the current 2010 UWMP) will be quantified through refined project developments in subsequent UWMPs (updated every five years). Therefore, additional water supplies that would mitigate this impact will be developed by SFPUC.

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Because SFPUC is the water service provider to the City and the entity that has the ability to mitigate this impact, and because the City does not have jurisdiction over the development of new water supplies, the City cannot guarantee that additional water supplies will be developed, so the impact is considered significant and unavoidable.

### TOD #2 Project

The WSA predicts the increase in water demand with implementation of the proposed TOD #2 project. The proposed TOD #2 project would result in a net increase of 164,535 square feet of office space, 46,935 square feet of retail space, 321 new residential units, and 116 hotel rooms. This would create an additional water demand of 172 AFY or 0.15 MGD.

#### *Normal Years*

The projected water supply versus water demand for the proposed TOD #2 project under normal year conditions is provided in Table 4.18-13.

**TABLE 4.14-13 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH TOD #2 PROJECT DURING NORMAL YEAR**

	2015	2020	2025	2030	2035
<b>Normal Year</b>					
<b>Total Supply (AFY)</b>	3,558	3,558	3,558	3,558	3,558
<b>Demand</b>					
Demand Without TOD #2 Project (AFY)	2,376	2,427	2,566	2,693	2,819
TOD #2 Project Water Demand (AFY)	172	172	172	172	172
<b>Total Demand (AFY)</b>	<b>2,548</b>	<b>2,599</b>	<b>2,738</b>	<b>2,865</b>	<b>2,991</b>
<b>Surplus/Deficit (AFY)</b>	1,010	959	820	693	567

Note: AFY = acre feet per year

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 15.

As shown on Table 4.14-13, the WSA results show that there is sufficient water for the proposed TOD #2 project during normal years through the project's buildout year 2020 and Specific Plan Update's buildout year 2035. Therefore, impacts under normal years would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

#### *Single- and Multiple-Dry Years*

The projected water supply versus water demand for the proposed TOD #2 project under single-dry year and multiple dry year conditions is provided in Tables 4.18-14 and 4.18-15.

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**TABLE 4.14-14 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH TOD #2 PROJECT IN SINGLE-DRY YEARS**

	2015	2020	2025	2030	2035
<b>Single Dry Year</b>					
<b>Total Supply (AFY)</b>	2,715	2,715	2,715	2,715	2,715
<b>Demand</b>					
Demand Without TOD #2 Project	2,376	2,427	2,566	2,693	2,819
Total TOD #2 Project Water Demand	172	172	172	172	172
<b>Total Demand (AFY)</b>	2,548	2,599	2,738	2,865	2,991
<b>Surplus/Deficit</b>	167	116	-23	-150	-276

Note: AFY = acre feet per year

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 15.

**TABLE 4.14-15 EXISTING AND PROJECTED WATER SUPPLY AND DEMAND WITH TOD #2 PROJECT DURING MULTIPLE-DRY YEARS**

	2015	2020	2025	2030	2035
<b>Multiple Dry Years</b>					
<b>Total Supply (AFY)</b>	2,361	2,361	2,361	2,361	2,361
<b>Demand</b>					
Total Demand Without Project	2,376	2,427	2,566	2,693	2,819
Total TOD #2 Project Water Demand	172	172	172	172	172
<b>Total Demand (AFY)</b>	2,548	2,599	2,738	2,865	2,991
<b>Surplus/Deficit</b>	-187	-238	-377	-1,504	-630

Note: AFY = acre feet per year

Source: GHD, 2015. *City of Millbrae Water Supply Assessment* dated June 2015, Table 15.

As is the case for the proposed TOD #1 project, the WSA results show that there is sufficient water for buildout of the proposed TOD #2 project during normal years and single dry years until 2020. However, there will be a deficit of water starting in year 2025 for a single-dry year and a deficit of water from 2015 through 2035 with multiple-dry years. Same as with the proposed TOD #1 project, the water demand would exceed water supply for multiple-dry years even without the proposed TOD #2 project. As stated above, like the proposed TOD #1 project, the TOD #2 project would be required to comply water conservation policies Specific Plan Update Policies UD 11, OS 5, IMP 4, IMP 9, UTIL-3, UTIL 4 and UTIL 16. Furthermore, there are water conservation and water efficiency measures that could be implemented by the City to reduce the deficit, as well as implementation of the City's WSCP, the addition of supplies developed through the BAWSCA's long-term water

## UTILITIES AND SERVICE SYSTEMS

supply strategy and the SFPUC's WSIP improvements. However, the insufficient water supply during dry years would result in a *significant* impact.

**Impact UTIL-TOD#2-1:** Implementation of the proposed TOD #2 project would not have sufficient water supplies available to serve the project from existing entitlements and resources during multiple dry years.

**Mitigation Measure UTIL-TOD#2-2:** Implement Mitigation Measure UTIL-TOD#1-1.

**Significance With Mitigation:** Significant and Unavoidable. Supplemental water supply sources for the 2020 buildout year of the proposed Specific Plan Update would be identified and developed by SFPUC. As the 2010 UWMP is updated, supplemental water supply sources beyond 2035 (the planning horizon of the current 2010 UWMP) will be quantified through refined project developments in subsequent UWMPs (updated every five years). Therefore, additional water supplies that would mitigate this impact will be developed by SFPUC. Because SFPUC is the water service provider to the City and the entity that has the ability to mitigate this impact, and because the City does not have jurisdiction over the development of new water supplies, the City cannot guarantee that additional water supplies will be developed, so the impact is considered significant and unavoidable.

**Significance With Mitigation:** Significant and unavoidable.

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UTIL-2	The proposed Project would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.
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## Specific Plan Update

The City's only source of water is the SFPUC, delivered through five connections. The City does not own or operate a water treatment plant. The water purchased from the SFPUC is treated at the Harry Tracy Water Treatment Plant (WTP) to meet all drinking water standards and fluoride is added. SFPUC recently completed improvements to this WTP to improve system reliability and accommodate projected growth in its regional service areas. As a result, the proposed Specific Plan Update would not prompt a need to expand treatment facilities in order to meet its demand and this impact would be *less than significant*.

However, the existing water distribution system may be undersized to provide sufficient fire flow for the planned uses within the Specific Plan Area. The City regularly replaces aging components of its water distribution system. For example, the City's CIP includes the following individual project line items and budgets for the Water System,<sup>20</sup> for fiscal years 2014-2015 through 2018-2019: (1) Fire Hydrant Upgrades/Replacement (\$300K); (2) Water Main Replacement (\$5.300 million); (3) Pump Station Rehabilitation (\$275K); (4) Water Tank: New (\$ 2.550 million); (5) Water Main Replacement (\$1.300 million) is a budget carry over request from FY 2013-2014; and 6)

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<sup>20</sup> Millbrae City Council Agenda Report, June 10, 2014. Resolution Adopting the Budget for Fiscal Year 2014/2015, Table 4 – Water System, <http://www.ci.millbrae.ca.us/Modules>ShowDocument.aspx?documentid=5889>

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Water Tanks Maintenance (\$825K). The total cost for all water system projects in this 5-year CIP period is \$11.420 million. Most of these costs (\$8.105 million) are unfunded; the remainder (\$3.315 million) is allocated from the Water Fund.

As shown on Figure 3-16 in Chapter 3, Project Description, of this Draft EIR the existing water system within the Specific Plan Area is inadequate to provide sufficient fire flow for the planned uses of the parcel areas. Some current distribution lines are likely to be undersized for the required fire flow required for future projects under the Specific Plan Update and improvements and would require replacement with larger diameter pipes. Potential environmental impacts could result from construction and operation of these pipeline improvements; however, such impacts would be project-specific. Potential environmental impacts could result from construction and operation of these pipeline improvements; however, such impacts would be project-specific. Any new or expanded water facilities would require permitting and review in accordance with CEQA, which would ensure environmental impacts are disclosed and mitigated to the extent possible. Furthermore, General Plan Policy LU5.1 and Implementation Policy UTIL-4 of the Specific Plan Update requires that new projects which require construction or expansion of public improvements shall pay their fair share of the costs necessary to improve or expand infrastructure to serve them, including water service. Compliance with these policies would ensure impacts related to adequate water service would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### TOD #1 Project

Implementation of the proposed TOD #1 project would result in the development of 270,000 square feet of office space, 32,000 square feet of retail space, and 500 residential units. The WSA performed for the proposed Project estimated increased water demand of approximately 182 AFY for the TOD #1 project.

The proposed TOD #1 project is within the City's Pressure Zone #4. Tank storage has not yet been developed in this pressure zone due to the direct connection to the Hetch Hetchy transmission infrastructure through this area. As discussed in the WSA for the proposed TOD #1 project, the water demand exceeds the water supply for single-dry and multiple-dry years. In addition, fire water flows are restricted by undersized lines and loop limitations throughout the City's system. Coordination with the Fire Marshall will be needed to determine the fire flows necessary for the proposed improvements throughout the proposed TOD #1 project site and consideration given to possible additional local storage for emergency response scenarios.

The additional demand from the proposed TOD #1 project will affect the already limited capacity of fire water flows restricted by undersized lines and loop limitations throughout the City's system. The Millbrae CIP for the Water System does not specifically address and fund the additional capacity needs of the proposed TOD #1 project. The inability of the existing fire water flow system to accommodate the increased flows associated with the proposed TOD #1 project will require system infrastructure improvements by the project applicant/developer, resulting in a significant impact.

As with the Specific Plan Update, the proposed TOD #1 project applicant would be required to comply with General Plan Policy LU5.1 and Implementation Policy UTIL 4 of the Specific Plan Update, which requires that new projects which require construction or expansion of public improvements to pay their fair share of the costs

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necessary to improve or expand infrastructure to serve them, including water service. Compliance with these policies would ensure impacts related to adequate water service would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### TOD #2 Project

Implementation of the proposed TOD #2 project would result in the development of 164,535 square feet of office space, 46,935 square feet of retail space, 321 new residential units, and 116 hotel rooms. The WSA performed for the proposed Project estimated increased water demand of approximately 189 AFY for the proposed TOD #2 project.

The impact discussion under the proposed TOD #1 project above also applies to the proposed TOD #2 project.

**Significance Without Mitigation:** Less than significant.

#### 4.14.1.4 CUMULATIVE IMPACTS

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UTIL-3	<b>The proposed Project, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to water supply.</b>
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This section analyzes potential impacts related to water supply that could occur from the proposed Project in combination with reasonably foreseeable growth within the Millbrae water service area.

### Water Supply

The City's 2010 UWMP indicates that the City has sufficient water supply to meet demand in normal years. However, the 2010 UWMP indicates that there would be a water deficit beginning in year 2015 for single and multiple dry years.<sup>21</sup> Similarly, the results of the WSA indicate that there would be sufficient water for the proposed Project during normal years, except for a small deficit of water (18 AFY) in the year 2035, which could be met with 1) existing water conservation and water efficiency measures, 2) BAWSCA's long-term water supply strategy, and 3) SFPUC's WSIP improvements. However, there would be a deficit of water for single- and multiple-dry years with or without implementation of the proposed Project. Although the City is almost completely built out, cumulative projects would contribute to additional water demands. However, future projects, like the proposed Project would be subject to the same water conservation measures in the City's Municipal Code and water conservation and water efficiency measures would be implemented by the City to reduce the deficit, as well as implementation of the City's WSCP, the addition of supplies developed through the BAWSCA's long-term water supply strategy, and the SFPUC's WSIP improvements.

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<sup>21</sup> City of Millbrae, 2011. *2010 Urban Water Management Plan*. Prepared by Kennedy/Jenks Consultants, dated June 2011.

Because there are inadequate water supplies to serve the proposed Project in combination with other reasonably foreseeable projects in the surrounding area, cumulative impacts would be *significant and unavoidable* with implementation of Mitigation Measures UTIL-SP-1 and UTIL-TOD#1-1.

**Significance With Mitigation:** Significant and Unavoidable

## Fire Water Flow System

The existing fire water flow system adjacent to the Project area has limited capacity to accommodate additional peak fire water flow demands. Therefore, fire water flow system infrastructure improvements will be required by applicants/developers of proposed new projects with substantial sewer generation, as with the proposed Project.

Future development in the city would be subject to the development review process and would be required to mitigate any effects to water services on a project-by-project basis. Same as the proposed Project, future development would also be required to comply with all applicable regulations and ordinances protecting water supply services as described in Section 4.14.1.1, including the payment of their fair share of the costs necessary to improve or expand infrastructure to serve them, including water service.

Therefore, cumulative development combined with the proposed Project would not exceed fire water flow system capacity requirements, and cumulative impacts to fire water flow service would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

## 4.14.2 SANITARY WASTEWATER (SEWER)

This section outlines the regulatory setting, describes existing conditions, and discusses potential impacts from buildout of the Specific Plan Update and development of the proposed TOD #1 and TOD #2 projects with regard to wastewater collection and treatment facilities.

The analysis in this section is based in part of information provided in the following reports:

- Wet Weather Alternatives Analysis Report prepared for the City of Millbrae by West Yost Associates dated November 2014.
- Capacity Assurance Report prepared for the City of Millbrae by West Yost Associates dated June 2012.

These reports are available at the City of Millbrae Public Works Department.

## UTILITIES AND SERVICE SYSTEMS

### 4.14.2.1 ENVIRONMENTAL SETTING

#### Regulatory Framework

##### *Federal Regulations*

The federal government regulates wastewater treatment and planning through the Federal Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), as well as through the National Pollutant Discharge Elimination System (NPDES) permit program, both of which are discussed in further detail below.

##### Clean Water Act

The CWA regulates the discharge of pollutants into watersheds throughout the nation. It is the primary federal law governing water pollution. Under the CWA, the US EPA implements pollution control programs and sets wastewater standards. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

##### National Pollutant Discharge Elimination System

The NPDES permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

##### *State Regulations*

Wastewater treatment and planning is regulated at the State level. Specific regulations relevant to the proposed Project are described below.

##### State Water Resources Control Board

On May 2, 2006 the SWRCB adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1 mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows (SSOs) by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan

## UTILITIES AND SERVICE SYSTEMS

(SSMP). The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

The SWRCB has delegated authority to nine Regional Water Quality Control Boards (RWQCB) to enforce these requirements within their region. The San Francisco Bay RWQCB issues and enforces NPDES permits in Millbrae. NPDES permits allow the RWQCB to regulate where and how the waste is disposed, including the discharge volume and effluent limits of the waste and the monitoring and reporting responsibilities of the discharger. The RWQCB is also charged with conducting inspections of permitted discharges and monitoring permit compliance.

### Sanitary District Act of 1923

The Sanitary District Act of 1923 (Health and Safety Code Section 6400 et seq.) authorizes the formation of sanitation districts and enforces the Districts to construct, operate, and maintain facilities for the collection, treatment, and disposal of wastewater.<sup>22</sup> The Act was amended in 1949 to allow the Districts to also provide solid waste management and disposal services, including refuse transfer and resource recovery.

### *Local Regulation*

#### Millbrae 1998-2015 General Plan

The City of Millbrae General Plan outlines various goals, policies and programs relevant to wastewater and infrastructure in the Land Use Element. The policies relevant to the proposed Project are listed in Table 4.14-16.

TABLE 4.14-16 GENERAL PLAN POLICIES RELEVANT TO SANITARY WASTEWATER

Number	Policy
<b>Land Use (LU) Element</b>	
LU5.1	<b>Adequacy of Public Infrastructure and Services.</b> Ensure that new and existing developments can be adequately served by municipal services and "facilities in accordance with City standards. New projects which require construction or expansion of public improvements shall pay their fair share of the costs necessary to improve or expand infrastructure to serve them, including street improvements, parks, water storage tanks, sewer and water service, and other public services.
LU5.4	<b>Capital Improvement Program (CIP).</b> Continue to maintain a multi-year Capital Improvement Program (CIP) supporting policies in the General Plan to maintain, improve, or expand Citywide facilities and infrastructure.
LU5.5	<b>Adequate Utility Infrastructure.</b> Provide safe, reliable, and adequate utility infrastructure to meet the City's new and existing needs and to comply with applicable state, regional, and federal regulations, including: (1) water supply for existing and new normal and emergency needs; (2) sanitary sewer collection; (3) wastewater treatment and disposal; and (4) stormwater collection as necessary to provide adequate drainage and flood protection during periods of high rain and high tides.
LU5.7	<b>Water Conservation Techniques.</b> Promote the use of low-water-use and fire suppression landscaping and other water conservation measures.

Source: City of Millbrae General Plan 1998-2015, adopted 1998.

<sup>22</sup> California Health and Safety Code, <http://leginfo.ca.gov/cgi-bin/calawquery?codesection=hsc>, accessed on November 18, 2011.

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### Millbrae Municipal Code

The City of Millbrae Municipal Code contains all ordinances for the city. The Municipal Code is organized by Title, Chapter, and Section. The current Municipal Code is up to date through Ordinance 747, passed May 27, 2014. The following provisions of Title 4, Public Safety, Title 6, Sanitation and Health, Title 8, Public Works, and Title 9, Building Regulations, of the Municipal Code help to minimize adverse effects related to wastewater as a result of development in Millbrae:

- **Chapter 4.65 Hazardous Materials Storage.** The purpose of this chapter is the protection of health, life, resources, and property through prevention and control of unauthorized discharges of hazardous materials.
- **Chapter 6.20 Municipal Services.** The purpose of this chapter is to regulate the provision of municipal services, including collection of garbage and rubbish, and water and sewer services.
- **Chapter 8.20 Municipal Sanitary Sewer System.** The purpose of this chapter is to provide for, preserve and protect the public health, safety and general welfare of the citizens of Millbrae, including by: 1) Preventing the introduction of pollutants into the Publicly Owned Treatment Works (POTW) that will interfere with its operation; 2) Preventing the introduction of pollutants into the POTW that will pass through the POTW inadequately treated into receiving waters or that are otherwise incompatible with the POTW; 3) Protecting the general public and POTW personnel who are exposed to wastewater and sludge in the course of their employment; and 4) Promoting reuse and recycling of industrial wastewater and sludge from the POTW.
- **Chapter 9.70 Drainage Connection to Sewers.** This chapter prohibits any person, persons, firm, or corporation to cause or permit any water that may accumulate on the roof of any building or on or in any land in the city to flow into any sanitary sewer in said city, by means of any drainpipe or pipes from such building or from such land.

### Capital Improvement Program (CIP)

The City of Millbrae's CIP, is a short-range plan, which identifies capital projects and equipment purchases, provides a planning schedule and identifies options for financing the identified improvements. The CIP for the Sewer Collection System includes the following individual project line items and budgets for the Sewer Collection System, for fiscal years 2014-2015 through 2017-2018:<sup>23</sup>

Flow Monitoring (\$100K) to measure real flow rates to calibrate hydraulic model

Madrone Lift Station (\$7.060 million) to continue Madrone basin inflow and infiltration reduction project

Sewer Lateral Program (\$1.625 million) to replace sewer laterals to reduce inflow and infiltration.

Sewer Main Replacement (\$ 6.925 million) to continue aging pipeline replacement to minimize sanitary sewer overflow (SSO) and III and to prevent pipeline failure

Sewer Main Replacement (\$1.329 million) is a budget carry over request from FY 2013-2014, to replace aging pipeline to reduce SSO and to prevent pipeline failure

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<sup>23</sup> Millbrae City Council Agenda Report, June 10, 2014. Resolution Adopting the Budget for Fiscal Year 2014/2015, Table 5 – Sewer Collection System, <http://www.ci.millbrae.ca.us/Modules>ShowDocument.aspx?documentid=5889>.

Storage Basin (\$2.2 million) for wet weather storage to address insufficient capacity in existing collection system due to high I/I

The total cost for all sewer collection system projects in this 5-year CIP period is \$20.198 million. Most of these costs (\$16.360 million) are identified as “unfunded”; the remainder (\$3.838 million) is allocated from the Sanitation Fund. In addition, more than \$20 million of the total 5-year CIP cost is comprised of Rainfall Dependent Infiltration Inflow (RDI) reduction projects, capacity upgrades and sewer repair/replacement projects in response to the Consent Decree between San Francisco Baykeeper and the City, effective November 15, 2010. Financing for sewer improvements comes from the City’s Enterprise Fund, which are used to account for self-supporting activities that provide services on a user-charge basis. The City provides water treatment and collection to their residents. Users of these services pay utility fees, which the City deposits into an enterprise fund.

## **Existing Conditions**

The City of Millbrae Public Works department is responsible for the regulation, collection, treatment and disposal of wastewater from all residential and commercial sources within the city's sewer service area.

### *Wastewater Collection*

The City provides sewer services throughout its jurisdiction and for Capuchino High School (San Bruno, California). The Department of Public Works, Operations and Maintenance Division, is responsible for inspecting, maintaining and repairing the sanitary sewer collection system, including 56 miles of sewer lines, and responding to customer emergency service requests.

Sewage is collected primarily in gravity flow lines supplemented by three pumping stations and force mains that convey flows to the Millbrae Water Pollution Control Plant (WPCP) for treatment. The WPCP is located in the northeast quadrant of the U.S. 101 and Millbrae Avenue interchange, within the limits of the Specific Plan Area. Most of the city's large primary sewer lines pass immediately adjacent to or through the plan area. The main trunk sewer lines range in size from 10 inches to 36 inches as they convey flows west to east, with other lines ranging from 6 inches to 18 inches in the Specific Plan Area (refer to Figure 3-17, in Chapter 3, Project Description of this Draft EIR).

Operation of the collection system is subject to the SWRCB's General Waste Discharge Requirement (Order No. 2006-0003) to reduce sanitary sewer overflows (SSOs) by requiring all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan (SSMP).

Effective November 15, 2010, the City entered into a Consent Decree with San Francisco Baykeeper (Baykeeper), the purpose of which is to reduce SSOs in the City's sanitary sewer collection system. In compliance with the Consent Decree, the City is working to reduce the risk of SSOs occurring in its collection system in three ways:

- Comprehensively inspecting the collection system to identify and correct defects;
- Enhancing collection system preventative maintenance activities; and
- Providing hydraulic capacity to convey and treat Peak Wet Weather Flow (PWWF).

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The City has achieved the following during the implementation of the Consent Decree with respect to inspection of the collection system:<sup>24</sup>

- The Consent Decree specifies that all small diameter gravity mains (15 inches in diameter and smaller) be inspected through Closed Circuit Television (CCTV) by November of 2014. All gravity mains regardless of diameter have been inspected by September 2014, ahead of the Consent Decree deadline.
- Gravity mains with National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) Severity 5 structural defects have been identified and repaired or replaced or scheduled to be repaired and replaced as part of the rehabilitation process, leading to an improved collection system with a lower risk of SSOs resulting from structural failures.

The City completed a Capacity Assurance Report for its wastewater collection system in June 2012 (2012 CAR).<sup>25</sup> The hydraulic evaluation in the 2012 CAR indicated that, under PWWF conditions, several portions of the City's collection system provided insufficient capacity to convey flow without SSOs. In addition to gravity mains at various locations throughout the city, the Madrone Pump Station (Madrone PS) and its associated force main, and the Water Pollution Control Plant (WPCP) were found to be hydraulically insufficient for the design storm (10 year, 24 hour), potentially requiring capacity improvements and the installation of wet weather storage.

Improvement projects were identified and detailed in the 2012 CAR.

The results of the 2012 CAR indicated that the City's collection system has adequate hydraulic capacity for Average Dry Weather Flow (ADWF) and Peak Dry Weather Flow (PDWF) conditions, and therefore it is the addition of RDII during wet weather events that drives the required capacity improvements identified in the 2012 CAR. RDII results when flows from wet weather events infiltrate the system, either through defects in existing facilities, or unpermitted connections that convey storm water into the sewer system.

Although the 2012 CAR recommends projects based only on increasing infrastructure size, there are actually three methods through which insufficient capacity for PWWF in the collection system can be alleviated: 1) increasing the system's capacity to convey PWWF at the current levels of RDII; 2) reducing RDII levels such that the PWWF does not exceed the capacity of the collection system; or 3) through a combination of capacity improvement and RDII reduction. The City of Millbrae 2014 Wet Weather Alternatives Analysis (2014 WWAA)<sup>26</sup> evaluates whether an alternative to the 2012 CAR infrastructure improvements focused on RDII reduction in combination with hydraulic capacity improvements can provide a more effective, environmentally responsive, and sustainable solution while still meeting the Consent Decree requirements.<sup>27</sup> The results of the 2014 WWAA are discussed below under the subheading "Peak Flow Reduction and Capacity Improvement."

<sup>24</sup> City of Millbrae, November, 2014. *Wet Weather Alternatives Analysis Report*, prepared by West Yost Associates, consulting engineers.

<sup>25</sup> City of Millbrae, June, 2012. *Capacity Assurance Report*, prepared by West Yost Associates, consulting engineers; submitted by the City of Millbrae In Response to Consent Decree between San Francisco Baykeeper and City of Millbrae, effective November 15, 2010.

<sup>26</sup> City of Millbrae, November, 2014. *Wet Weather Alternatives Analysis*, prepared by West Yost Associates, consulting engineers.

<sup>27</sup> The 2014 *Wet Weather Alternatives Analysis Report* has been transmitted to San Francisco Baykeeper for review and approval. Once Baykeeper approves the 2014 report the City will begin implementing the project; email correspondence, Khee Lim, City of Millbrae, to Brad Johnson, PlaceWorks, March 6, 2015.

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### *Wastewater Treatment and Disposal*

The Millbrae Department of Public Works, Water Pollution Control Plant Division, operates and maintains the WPCP located at 400 East Millbrae Avenue. Operation of the WPCP is subject to waste discharge requirements (WDRs) set forth in Order No. R2-2013-0037 (NPDES No. CA0037532) issued by the San Francisco Bay RWQCB.<sup>28</sup> The Order No. R2-2013-0037 was effective February 1, 2014, and expires January 31, 2019.

The WPCP provides primary and secondary treatment for all sanitary sewage generated within the city limits and Capuchino High School. The treatment processes include a head-works (with coarse and fine bar screens and grit removal), primary sedimentation in rectangular clarifiers, biological activated sludge treatment, secondary clarification, disinfection with sodium hypochlorite, and final effluent skimming. Chlorinated secondary effluent is discharged to the North Bayside Systems Unit (NBSU)<sup>29</sup> force main and de-chlorinated at the South San Francisco and San Bruno Water Quality Control Plant in South San Francisco prior to discharge into Lower San Francisco Bay through the NBSU outfall.

The Millbrae WPCP has an average dry weather permitted design capacity of 3.0 million gallons per day (MGD) of wastewater. From August 2008 through December 2012, its average dry weather flow was 1.3 MGD, as reported by the RWQCB (Order No. R2-2013-0037). During wet weather, the WPCP is permitted to process up to 9.0 MGD of wastewater.

Given that the outfall capacity is currently contractually limited to 9.0 MGD, PWWF in excess of 9.0 MGD must be stored temporarily onsite so that discharge flows can be attenuated through the outfall. The WPCP currently has 1.3 MGD of equalization storage at the WPCP. However, based on the PWWF analysis in the 2012 CAR, additional storage is necessary. The existing WPCP site is constrained, such that land would need to be acquired to locate additional storage facilities off-site. Increasing WPCP *treatment* capacity to accommodate anticipated PWWF is generally considered to be much less desirable than increasing *storage* capacity.

An alternative to increasing storage capacity of the WPCP is to decrease PWWF by controlling inflow and infiltration (inflow and infiltration), especially RDII. Inflow and infiltration is considered to have a rainfall-dependent component and a non-rainfall-dependent component – groundwater infiltration (GWI). RDII is the rainfall-dependent component of inflow and infiltration, and it consists of a combination of inflow and rainfall-dependent infiltration.

### *Peak Flow Reduction and Capacity Improvement*

The 2014 WWAA report indicates that while PWWF cannot feasibly be reduced below the capacity of the Madrone PS, options exist for reducing PWWFs below the existing capacities of the WPCP and the Madrone

<sup>28</sup> Order No. R2-2013-0037 (NPDES No. CA0037532) issued by the San Francisco RWQCB, [http://www.waterboards.ca.gov/sanfranciscobay/board\\_decisions/adopted\\_orders/2013/R2-2013-0037.pdf](http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2013/R2-2013-0037.pdf).

<sup>29</sup> The NBSU is a joint powers authority comprised of the cities of Burlingame, Millbrae, South San Francisco, San Bruno, and the San Francisco International Airport. The NBSU owns and operates a force main that collects treated wastewater from these jurisdictions and ultimately discharges it to Lower San Francisco Bay through a single pipe.

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## UTILITIES AND SERVICE SYSTEMS

Force Main (collection system),<sup>30</sup> and that include combinations of inflow source disconnections and collection system rehabilitation to reduce infiltration. A detailed analysis of PWWFs and the options to reduce them are developed and discussed in the 2014 WWAA report.

For the purposes of this analysis, the 2012 CAR sub-divided the collection system into eight basins. The observed RDII levels in each basin are presented in the 2014 WWAA report as the percentage of the volume of rainfall that falls within each basin that inflows or infiltrates into the collection system at various rates (fast, medium, and slow).

The 2014 WWAA report identifies a preferred alternative (“Alternative 3”) to reduce RDII in public and private infrastructure. In Alternative 3 privately-owned “upper” sewer laterals are rehabilitated simultaneously with the other infrastructure (man holes, sewer mains, “lower” laterals). Alternative 3 complies with Consent Decree requirements by eliminating RDII by repairing existing wastewater infrastructure and minimizing the need for additional wastewater facilities and capacity.

When evaluating the impact of the City implementing a focused program to rehabilitate the entire system (manholes, main lines, lower laterals) including privately owned upper laterals (i.e. Alternative 3) the 2014 WWAA report projects a reduction of 70 percent of the fast and medium RDII. When evaluating the impact of the City implementing a focused program to rehabilitate only the publically-owned mains, manholes, and lower laterals, but in which privately-owned upper laterals will only be rehabilitated voluntarily or in conjunction with the sale of property or obtaining a building permit, a reduction between 30-50 percent of the slow, medium and fast RDII is projected.

### 4.14.2.2 STANDARDS OF SIGNIFICANCE

The proposed Project would have a significant impact on wastewater service if it would:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
2. Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.

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<sup>30</sup> The 2012 CAR hydraulic model evaluated the WPCP, pump stations, and force mains as part of the “collection system”. The City’s collection system flows terminate at the WPCP. Because the WPCP has limited hydraulic capacity that affects the operation of the collection system, the WPCP is actively modeled in the 2012 CAR hydraulic model. The WPCP itself is modeled as a pump that discharges to the hydraulic model system outfall. Additionally, the WPCP contains flow equalization storage. Flow equalization is modeled as a storage device with a pump for supply and an orifice to return flow to the influent wet well.

#### 4.14.2.3 IMPACT DISCUSSION

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UTIL-4	The proposed Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
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#### Specific Plan Update

As discussed in Chapter 3, Project Description, of this Draft EIR, the Specific Plan Area does not include any Industrial land uses. Existing Industrial uses in the Specific Plan Area are proposed to be developed as office or retail uses. The office, retail, residential and hotel land uses that would result from buildout of the Specific Plan Update would not generate wastewater of different quality and treatability than that generated by those land uses in the city currently. The WPCP is currently in compliance with its NPDES permit requirements. As such, buildout of the Specific Plan Area would not be expected to generate wastewater that would exceed the treatment requirements of the San Francisco Bay RWQCB (e.g. NPDES effluent limits applicable to the WPCP).

With continued compliance with applicable regulations listed below, wastewater generated from buildout of the Specific Plan Area would not exceed the San Francisco Bay RWQCB's applicable treatment requirements in Order No. R2-2013-0037 (NPDES No. CA0037532). Therefore, the wastewater treatment requirements of the San Francisco Bay RWQCB would not be exceeded due to buildout of the Specific Plan Area, resulting in a *less-than-significant* impact.

#### Applicable Regulations:

- San Francisco Bay RWQCB NPDES Permit (Order No. R2-2013-0037[NPDES No. CA0037532]) for WPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- City of Millbrae Municipal Code - Chapter 8.20, Municipal Sanitary Sewer System; Chapter 9.70, Drainage Connection to Sewers; Chapter 4.65, Hazardous Materials Storage; and Chapter 6.20, Municipal Services.
- City of Millbrae General Plan – Adequacy of Public Infrastructure and Services, LU5.1; Capital Improvement Program (CIP), LU5.4; Adequate Utility Infrastructure, LU5.5; Assessment and Determination of Existing Utility Infrastructure Capacity, LUIP-23; Utility Infrastructure Improvements, LUIP-24.

**Significance Without Mitigation:** Less than significant.

#### TOD #1 Project

The discussion provided above is also applicable to new development within the TOD #1 project site. Development allowed by the proposed TOD #1 project would include infill development of residential, retail, and office uses. Wastewater effluent associated with these land uses would not substantially increase pollutant loads, since there are no heavy industrial or agricultural processing uses in which pollutant loads and wastewater volumes are heavy.

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The proposed TOD #1 project would not exceed wastewater treatment requirements of the San Francisco Bay RWQCB, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

### TOD #2 Project

The discussion provided above is also applicable to new development within the TOD #2 project site. Development allowed by the proposed TOD #2 project would include infill development of residential, retail, hotel, and office uses. Wastewater effluent associated with these land uses would not substantially increase pollutant loads, since there are no heavy industrial or agricultural processing uses in which pollutant loads and wastewater volumes are heavy. This project would not exceed wastewater treatment requirements of the applicable San Francisco Bay RWQCB, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

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UTIL-5	<b>The proposed Project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.</b>
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### Specific Plan Update

As discussed above, the Millbrae WPCP is permitted by the San Francisco Bay RWQCB to treat an average of 3.0 MGD dry weather flow. From August 2008 through December 2012, WPCP's average dry weather flow was 1.3 MGD.<sup>31</sup> Thus, the WPCP had 1.7 MGD of unused permitted dry weather flow capacity.

According to these calculations, and as discussed in UTIL-6 below, future wastewater flows from buildout of the Specific Plan Area would not exceed the design or permitted dry weather treatment capacity of the wastewater treatment plant serving the Specific Plan Area (i.e. Millbrae WPCP).

The WPCP's PWWF design capacity is 9.0 MGD; plus 1.3 MGD equalization storage capacity. The 2014 WWAA report found that the WPCP was hydraulically insufficient for the peak wet weather flows, potentially requiring capacity improvements and the installation of wet weather storage. Development consistent with the Specific Plan Update would contribute to wastewater flows that, during peak wet weather, would exceed the PWWF capacity of the WPCP, resulting in the need for new wastewater storage capacity at the treatment plant and/or reduction in

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<sup>31</sup> Order No. R2-2013-0037 (NPDES No. CA0037532) issued by the San Francisco RWQCB, Attachment F (Fact Sheet), section II.A.3, [http://www.waterboards.ca.gov/sanfranciscobay/board\\_decisions/adopted\\_orders/2013/R2-2013-0037.pdf](http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2013/R2-2013-0037.pdf)

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RDII in the collection system.<sup>32</sup> Evaluation of impacts associated with insufficient peak wet weather storage capacity at the WPCP is addressed under the Collection System<sup>33</sup> heading as part of the UTIL-6 discussion below.

After buildout, the Specific Plan Area would continue to be provided with wastewater collection and treatment services from the City of Millbrae Department of Public Works, Water Pollution Control Plant Division. Existing infrastructure would be preserved in place and, if necessary, extensions and/or replacement of sewer pipes/lift stations would be installed to provide wastewater service to the proposed Specific Plan Area, as discussed further under UTIL-6 below.

Wastewater generated from the Specific Plan Area would not exceed the permitted treatment capacity of the WPCP specified in the San Francisco RWQCB's Order No. R2-2013-0037 (NPDES No. CA0037532). Therefore, the Specific Plan Update would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

### TOD #1 Project

The discussion provided above is also applicable to new development on the TOD #1 project site. As discussed in UTIL-6 below, future wastewater flows from the proposed TOD #1 project would not exceed the design or permitted dry weather flow treatment capacity of the WPCP serving the project. Development of the proposed TOD #1 project would contribute to peak wet weather wastewater flows that currently exceed the PWWF storage capacity of the WPCP, resulting in the need for new wastewater storage capacity at the treatment plant and/or reduction in RDII in the collection system. Potential project impacts associated with insufficient peak wet weather storage capacity at the WPCP are addressed under the Collection System heading in the UTIL-6 discussion below. The proposed TOD #1 project would not exceed wastewater treatment capacity of the WPCP, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

### TOD #2 Project

The discussion provided above is also applicable to new development on the TOD #2 project site. As discussed in UTIL-6 below, future demands from the proposed TOD #2 project would not exceed the design or permitted dry weather flow treatment capacity of the WPCP serving the project. Development of the proposed TOD #2 project would contribute to peak wet weather wastewater flows that currently exceed the PWWF capacity of the WPCP,

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<sup>32</sup> City of Millbrae, November, 2014. *Wet Weather Alternatives Analysis* report, prepared by West Yost Associates, consulting engineers.

<sup>33</sup> The 2012 CAR hydraulic model evaluated the WPCP, pump stations, and force mains as part of the “collection system”. The City of Millbrae’s Sewer Collection System CIP addresses the need for additional PWWF storage capacity at the WPCP; see Millbrae City Council Agenda Report, June 10, 2014.

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resulting in the need for new wastewater storage capacity at the treatment plant and/or reduction in RDII in the collection system. Potential project impacts associated with insufficient peak wet weather storage capacity at the WPCP are addressed under the Collection System heading in the UTIL-6 discussion below. This project would not exceed wastewater treatment capacity of the WPCP, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

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UTIL-6	The proposed Project would result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
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### Specific Plan Update

Buildout of the Specific Plan Area would result in a total of 1,653,340 square feet of office space, 275,110 square feet of retail space, 1,750 residential units, and 370 hotel rooms. Table 4.14-17 below estimates wastewater generation from buildout of the Specific Plan Area.

TABLE 4.14-17 WASTEWATER GENERATION – SPECIFIC PLAN UPDATE (TOTAL BUILDOUT)

Land Use	Wastewater Flow Factor <sup>a</sup>	Total Buildout <sup>b</sup> New Units/Square Feet (sf)	Wastewater Generated (gpd)
Office	0.1 gpd/sf	1,653,340 sf	165,334
Retail	0.1 gpd/sf	165,066 275,110 sf	16,507
Restaurants <sup>c</sup>	2.7778 gpd/sf	110,044 sf	305,680
Residential Units	186 gpd per unit	1,750 units	325,500
Hotel	200 gpd per room	370 rooms	74,000
<b>Total</b>			<b>887,021</b>

Notes: gallons per day = gpd, square feet = sf

a. Base Wastewater Flow factors from KHA 'infrastructure report,' December 18, 2014.

b. Projected total buildout = existing 1998 Specific Plan plus proposed Specific Plan Update.

c. Projected total buildout retail land use (275,110 sf) was taken from Project Description (Chapter 3 of this EIR) with an allowance made for a 40 percent restaurant generation rate (110,044 sf) as part of the total proposed retail space; the remaining retail is non-restaurant space (165,066 sf). The restaurant allowance is consistent with the projections of retail/restaurant mix used in the 1998 Millbrae Station Area Specific Plan EIR.

### Treatment System

Table 4.14-17 shows the projected wastewater generation rate for buildout of the Specific Plan Area is 887,021 gpd or 0.89 MGD. This represents a conservative estimate of the increase in wastewater flow for total buildout of the Specific Plan Area because it considers flows from existing land uses plus proposed new development under the

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Specific Plan Update, and also accounts for restaurants (which have high wastewater flows) as a separate category of retail space.

As discussed under UTIL-5 above, the WPCP is permitted by the RWQCB to provide secondary treatment of up to 3.0 MGD ADWF. From 2008 to 2012, the actual ADWF from the WPCP was 1.3 MGD. Thus, the WPCP had 1.7 MGD of unused permitted dry weather flow capacity.

The wastewater generation rate for buildout of the Specific Plan Update (0.89 MGD) represents 52 percent of the average excess dry weather capacity (1.7 MGD) available from 2008 to 2012 at the WPCP.

### Dry Weather Flow

According to these calculations, and as discussed in UTIL-5 above, future demands from the Specific Plan Update would not exceed the design or permitted *dry weather* flow capacity (3.0 MGD) of the wastewater treatment plant serving the Specific Plan Area (i.e. WPCP). Thus, in the near term, the buildout of the Specific Plan Update would not exceed the capacity of the WPCP (1.3 MGD + 0.89 MGD = 2.19 MGD; 2.19 MGD < 3.0 MGD), based on the WPCP capacity values reported by the RWQCB.

The City of Millbrae's 2010 UWMP projected wastewater flows of 2.21 MGD for the city to the year 2035.<sup>34</sup> The wastewater flow total of 2.21 MGD projected for 2035 included 0.66 MGD attributed to full buildout of proposed developments in the city, including the proposed 1998 Specific Plan. Adding the current projected wastewater flows from buildout of the Specific Plan Update (0.89 MGD) to the 2035 flows estimated in the 2010 UWMP, less than the 0.66 MGD projected flows from buildout of the 1998 Specific Plan and other proposed developments, yields a total flow less than the permitted capacity of the WPCP (2.21 MGD + 0.23 MGD (0.89 MGD – 0.66 MGD) = 2.44 MGD; 2.44 MGD < 3.0 MGD). Thus, in the future (2035), buildout of the Specific Plan Update area would not exceed the capacity of the WPCP. However, these calculations indicate future projected flows would approach the WPCP's dry weather treatment capacity.

### Wet Weather Flow

The peak wet weather flow capacity of the WPCP (9.0 MGD) has been shown to be exceeded during peak rainfall events.<sup>35</sup> Thus, buildout of the Specific Plan Update would generate wastewater flows which, when combined with PWWF, also would exceed the PWWF capacity of the WPCP, resulting in the need for new wastewater storage capacity and/or a reduction in inflow and infiltration flows into the system during PWWF.

The peak design wet weather flow of the WPCP is 9.0 MGD, plus 1.3 MGD equalization storage capacity. The 2012 CAR and 2014 WWAA reports indicate the WPCP is hydraulically insufficient for the PWWF, potentially requiring PWWF capacity improvements and/or reductions in PWWF. Evaluation of impacts associated with

<sup>34</sup> Millbrae, 2011. 2010 *Urban Water Management Plan* (UWMP), Table 4-1, Wastewater collection and treatment, prepared by Kennedy Jenks, June 30, 2011.

<sup>35</sup> City of Millbrae, 2014. *Wet Weather Alternatives Analysis*, prepared by West Yost Associates, consulting engineers.

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insufficient PWWF storage capacity at the WPCP will be addressed in the discussion under the Collection System<sup>36</sup> heading below.

The Specific Plan Update policies require that adequate infrastructure be provided in conjunction with new development. The Specific Plan Update also requires that project developers pay their pro-rata share of necessary improvements through assessments on new developments:

- Utilities and Public Services Policies
  - P-UTIL 2. Conduct a hydraulic study to determine necessary system upgrades.
  - P-UTIL 5. Provide improvements to the Millbrae treatment plant in order to accommodate planned new growth within the station planning area and the city as a whole.
  - P-UTIL 6. Improve the wastewater collection system to accommodate demands from new development.
- Implementation Policies
  - P-IMP 4. Require all new development projects pay their fair share for any needed infrastructure improvements, including the pedestrian/bicycle path and pedestrian/bicycle overcrossing over Highway 101 north of the Millbrae Avenue overcrossing
  - P-IMP 9. Complete a nexus study to apportion fair share costs of new utility infrastructure in the Plan Area.

Actions to reduce inflow and infiltration<sup>37</sup> could also provide for a reduction in the city's estimated existing base (i.e. dry weather) wastewater flow. Actions associated with citywide inflow and infiltration reduction, as discussed under the Collection System heading below, would directly benefit the extent of the required sanitary sewer improvements – including the process flow capacity of the WPCP – associated with buildup of the Specific Plan Area.

The policies above, along with continued compliance with applicable regulations listed below, ensure that wastewater generated from the Specific Plan Update would not exceed the treatment capacity of the WPCP, or the permitted capacity specified in the San Francisco Bay RWQCB's Order No. R2-2013-0037 (NPDES No. CA0037532). Therefore, the Specific Plan Update would not result in the determination by the wastewater treatment provider that it does not have adequate treatment capacity to serve the Specific Plan Update's projected demand in addition to the provider's existing commitments, resulting in a *less-than-significant* impact.

### Applicable Regulations:

- San Francisco Bay RWQCB NPDES Permit (Order No. R2-2013-0037 [NPDES No. CA0037532]) for WPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- City of Millbrae Capital Improvement Program

<sup>36</sup> The need for additional PWWF storage capacity at the WPCP is addressed by the City as part of the Sewer *Collection System* CIP; see Millbrae City Council Agenda Report, June 10, 2014. Resolution Adopting the Budget for Fiscal Year 2014/2015, Table 5 – Sewer Collection System; line item: “Storage Basin.” <http://www.ci.millbrae.ca.us/Modules/ShowDocument.aspx?documentid=5889>.

<sup>37</sup> City of Millbrae, 2014. Wet Weather Alternatives Analysis report, prepared by West Yost Associates, consulting engineers; see summary of inflow and infiltration action in Table 5 of the 2014 Report.

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- City of Millbrae Municipal Code - Chapter 8.20, Municipal Sanitary Sewer System; Chapter 9.70, Drainage Connection to Sewers.
- City of Millbrae General Plan – Adequacy of Public Infrastructure and Services, LU5.1; Capital Improvement Program (CIP), LU5.4; Adequate Utility Infrastructure, LU5.5; Assessment and Determination of Existing Utility Infrastructure Capacity, LUIP-23; Utility Infrastructure Improvements, LUIP-24.

**Significance Without Mitigation:** Less than significant.

### *Collection System*

Observed and monitored sanitary flows in and adjacent to the Specific Plan Area have demonstrated limited capacity of the collection system to accommodate PWWF.<sup>38</sup> An inability of the existing sanitary sewer collection system to accommodate a high rate of inflow and infiltration during PWWF (i.e. RDII), along with increased flows associated with the proposed Specific Plan Update, will require infrastructure improvements (i.e. capacity upgrades and/or RDII reductions).

The City regularly replaces aging components of its wastewater collection and transmission system. As described in Section 4.14.2.1 Environmental Setting, the City's CIP includes individual project line items and budgets for the Sewer Collection System, for fiscal years 2014-2015 through 2017-2018. The total cost for all sewer collection system projects in this 5 year CIP period is \$20.198 million. Most of these costs (\$16.360 million) are identified as "unfunded;" the remainder (\$3.838 million) is allocated from the Sanitation Fund. In addition, more than \$20 million of the total 5 year CIP cost is comprised of RDII reduction projects, capacity upgrades and sewer repair/replacement projects in response to the Consent Decree between San Francisco Baykeeper and the City, effective November 15, 2010.

The peak wet weather design flow of the WPCP is 9.0 MGD; plus 1.3 MGD equalization storage. The 2012 CAR and 2014 WWAA reports indicate the WPCP is hydraulically insufficient for the "design storm." Specifically, the WPCP had insufficient storage capacity for the PWWF, identified as a 10 year 24-hour peak storm, resulting in the potential need for wet weather storage capacity improvements at the WPCP. Evaluation of impacts associated with insufficient PWWF storage capacity at the WPCP is addressed under this Collection System heading because the WPCP has been hydraulically modeled as part of the collection system and is included in the City's CIP under collection system projects.<sup>39</sup>

The Specific Plan Update includes street realignments and significant development densities that would require sewer line removal or reconstruction along the El Camino Real parcels bordering Serra and Linden Avenues, as well as along the Aviador Avenue alignment on both sides of Millbrae Avenue. The 2012 CAR shows the gravity

<sup>38</sup> City of Millbrae, 2014. Wet Weather Alternatives Analysis report, prepared by West Yost Associates, consulting engineers;; and City of Millbrae, June, 2012. Capacity Assurance Report, prepared by West Yost Associates, consulting engineers.

<sup>39</sup> The 2012 CAR hydraulic model evaluated the WPCP, pump stations, and force mains as part of the "collection system". The City of Millbrae's *Sewer Collection System* CIP addresses the need for additional PWWF storage capacity at the WPCP; see Millbrae City Council Agenda Report, June 10, 2014.

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mains in these areas as system bottlenecks and pipe segments recommended for upsizing,<sup>40</sup> particularly a 500-foot section of 15-inch pipe between the El Camino Real and the railroad tracks. The 2014 WWAA shows over a half dozen documented sanitary sewer overflows throughout the Specific Plan Area and details the necessary gravity sewer capacity upgrades in Appendix C (Flow Meter Diurnal Curves), including replacement of approximately 1,200 feet of 18-inch diameter sewer main along Aviador Avenue.<sup>41</sup>

As previously stated, the Specific Plan Update includes policies listed above (i.e. Utilities and Public Services Policies UTIL 2, UTIL 5, and UTIL 6, and Implementation Policies IMP 4, and IMP 8) that would ensure adequate sewer system infrastructure is provided in conjunction with new development, and that project developers pay their pro-rata share of necessary improvements through assessments on new developments. Thus, impacts would be *less than significant*.

### Construction Impacts

Although creation of new or extended wastewater collection pipes, RDII reduction projects, and increased capacity projects could create short-term construction-related environmental effects (e.g. noise, dust, traffic, temporary service interruption, etc.), the work would be subject to compliance with the City's regulations and standard conditions for new construction related to wastewater lines. For example, these regulations and conditions would require the wastewater line construction to include best management practices that require construction areas to minimize dust generation, limit construction noise to daytime hours to limit impacts to sensitive receptors, and use modern equipment to limit emissions. In addition, General Plan policies regarding infrastructure and development impacts, as discussed below, would further ensure any potential adverse physical effects of these activities are *less than significant*.

### Fair Share Cost Impacts

The additional sanitary flows from the proposed Specific Plan Update will affect the already limited capacity of sewer pipes in and adjacent to the Specific Plan Area, resulting in the need for new sewer pipe infrastructure. In addition, the RDII associated with PWWF results in SSOs in the Specific Plan Area, which will be exacerbated by the increased flows from buildup of the Specific Plan Area. Insufficient capacity for PWWF in the collection system can be alleviated by a combination of capacity improvement and RDII reduction, and the associated requisite hydraulic modeling, monitoring and testing. The specific projects to accomplish this are summarized above and described more fully in the City of Millbrae's CIP (Millbrae CIP) for the Sewer Collection System. The Millbrae CIP for the Sewer Collection System does not specifically address how the additional capacity reduced RDII needs of the collection system will be funded. The inability of the existing sanitary sewer collection system to accommodate increased flows from buildup of the Specific Plan Area, combined with a high rate of RDII during PWWF, will require collection system infrastructure improvements to be implemented through fair share cost funding by the project applicants/developers. As previously stated, the Specific Plan Update includes policies

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<sup>40</sup> City of Millbrae, 2012. *Capacity Assurance Report*, prepared by West Yost Associates, consulting engineers; submitted by the city of Millbrae In Response to Consent Decree between San Francisco Baykeeper and City of Millbrae, effective November 15, 2010, Figures 6-2 and 6-8.

<sup>41</sup> City of Millbrae, 2014. *Wet Weather Alternatives Analysis* report, prepared by West Yost Associates, consulting engineers, Figure 8.

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listed above (i.e. Utilities and Public Services Policies UTIL 2, UTIL 5, and UTIL 6, and Implementation Policies IMP 4, and IMP 8) that would ensure adequate sewer system infrastructure is provided in conjunction with new development, and that project developers pay their pro-rata share of necessary improvements through assessments on new developments. Thus, impacts would be *less than significant*.

**Significance Without Mitigation:** Less than significant.

### TOD #1 Project

Implementation of the proposed TOD #1 project would result in the development of 267,000 square feet of office space, 32,000 square feet of retail space, and 500 residential units. Table 4.14-18 below shows estimated wastewater generation from development of the proposed TOD #1 project. As shown, the proposed TOD #1 project will generate approximately 157,176 gpd of wastewater.

**TABLE 4.14-18 WASTEWATER GENERATION – TOD #1 PROJECT (TOTAL BUILDOUT)**

Land Use	Wastewater Flow Factor <sup>a</sup>	Total Buildout <sup>b</sup> New Units/ Square Feet (sf)	Wastewater Generated (gpd)
Office	0.1 gpd/sf	267,000 sf	26,700
Retail	0.1 gpd/sf	19,200 sf	1,920
Restaurants <sup>c</sup>	2.7778 gpd/sf	12,800 sf	35,556
Residential Units	186 gpd per unit	500 units	93,000
Hotel	200 gpd per room	0 rooms	0
<b>Total</b>			<b>157,176</b>

Notes: gallons per day = gpd, square feet = sf

a. Base Wastewater Flow factors from KHA ‘infrastructure report,’ December 18, 2014.

b. Projected total buildout = proposed TOD #1 project.

c. Projected total buildout retail land use (32,000 sf) was taken from Project Description (Chapter 3 of this EIR) with an allowance made for a 40 percent restaurant generation rate (12,800 sf) as part of the total proposed retail space; the remaining retail is non-restaurant space (19,200 sf).. The restaurant allowance is consistent with the projections of retail/restaurant mix used in the 1998 Millbrae Station Area Specific Plan EIR.

### *Treatment System*

As discussed under UTIL-5 for total buildout of the Specific Plan Update above, the WPCP is permitted by the RWQCB to provide secondary treatment of up to 3.0 MGD, ADWF. From 2008 to 2012, the actual ADWF from the WPCP was 1.3 MGD. Thus, the WPCP had 1.7 MGD of unused permitted dry weather flow capacity. With continued compliance with applicable regulations, wastewater generated from the proposed TOD #1 project would not exceed the dry weather flow capacity of the WPCP; i.e. the permitted dry weather capacity specified in the San Francisco Bay RWQCB’s Order No. R2-2013-0037 (NPDES No. CA0037532).

The permitted wet weather flow of the WPCP is 9.0 MGD. The 2012 CAR and 2014 WWAA reports indicate the WPCP is hydraulically insufficient for the “design storm” (10 year, 24-hour storm). Specifically, the WPCP had insufficient storage capacity for the Peak Wet Weather Flow (PWWF) of a 10 year 24-hour peak storm, potentially

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requiring capacity improvements and the installation of wet weather storage. The potential impacts of the proposed TOD #1 project related to current exceedance of peak wet weather storage capacity at the WPCP is addressed in the Collection System discussion below.

Therefore, because the proposed TOD #1 project would not result in the determination by the wastewater treatment provider that it does not have adequate treatment capacity to serve the proposed TOD #1 project's projected demand in addition to the provider's existing commitments, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

### *Collection System*

The additional sanitary flows from the proposed TOD #1 project will affect the already limited capacity of sewer pipes adjacent to the TOD #1 project site. The Millbrae CIP for the Sewer Collection System does not specifically address funding the needed additional sewer capacity and/or reduced RDII for the sewer collection system, including the additional needs of the proposed TOD #1 project. The inability of the existing sanitary sewer system to accommodate the increased flows associated with the proposed TOD #1 project, combined with a high rate of inflow and infiltration, will require funding and implementation of collection system infrastructure improvements and/or reductions in inflow and infiltration during PWWF (i.e. RDII); thus, impacts would be *significant*.

**Impact UTIL-TOD#1-6:** The proposed TOD #1 project would adversely affect the already limited capacity of sewer pipes adjacent to the TOD #1 project site.

**Mitigation Measure UTIL-TOD#1-6.** Prior to the issuance of building permits, the proposed TOD #1 project applicant, in coordination with the City, shall engineer, design and construct or pay their fair share of the capital improvements required to increase capacity and/or reduce RDII for the sewer collection and treatment system, based on hydraulic studies and agreements forthcoming by the applicant, prior to City approval of the project building permits.

**Significance With Mitigation:** Less than significant.

### TOD #2 Project

Implementation of the proposed TOD #2 project would result in the development of 164,535 square feet of office space, 46,935 square feet of retail space, 321 residential units, and 116 hotel rooms. Table 4.14-19 below shows estimated wastewater generation from development of the proposed TOD #2 project. As shown, the proposed TOD #2 project will generate approximately 154,325 gpd of wastewater.

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**TABLE 4.14-19 WASTEWATER GENERATION – TOD #2 PROJECT (TOTAL BUILDOUT)**

	<b>Wastewater Flow Factor<sup>a</sup></b>	<b>Total Buildout<sup>b</sup> New Units/ Square Feet (sf)</b>	<b>Wastewater Generated (gpd)</b>
Office	0.1 gpd/sf	164,535 sf	16,453
Retail	0.1 gpd/sf	28,161 sf	2,816
Restaurants <sup>c</sup>	2.7778 gpd/sf	18,774 sf	52,150
Residential Units	186 gpd per unit	321 units	59,706
Hotel	200 gpd per room	116 rooms	23,200
<b>Total</b>			<b>154,325</b>

Notes: gallons per day = gpd, square feet = sf

a. Base Wastewater Flow factors from KHA ‘infrastructure report,’ December 18, 2014.

b. Projected total buildout = proposed TOD #2 project.

c. Projected TOD #2 project total retail land use (46,935 sf) was taken from Project Description (Chapter 3 of this EIR) with an allowance made for a 40 percent restaurant generation rate (18,774 sf) as part of the total proposed retail space; the remaining retail is non-restaurant space (28,161 sf).. The restaurant allowance is consistent with the projections of retail/restaurant mix used in the 1998 Millbrae Station Area Specific Plan EIR.

### *Treatment System*

As discussed under UTIL-5 above, the WPCP is permitted by the RWQCB to provide secondary treatment of up to 3.0 MGD ADWF. From 2008 to 2012, the actual ADWF from the WPCP was 1.3 MGD. Thus, the WPCP had 1.7 MGD of unused permitted dry weather flow capacity. With continued compliance with applicable regulations, wastewater generated from the proposed TOD #2 project would not exceed the dry weather flow capacity of the WPCP; i.e. the permitted dry weather capacity specified in the San Francisco Bay RWQCB’s Order No. R2-2013-0037 (NPDES No. CA0037532).

The permitted wet weather flow of the WPCP is 9.0 MGD. The 2012 CAR and 2014 WWAA reports indicate the WPCP is hydraulically insufficient for the “design storm” (10 year, 24-hour storm). Specifically, the WPCP had insufficient storage capacity for the Peak Wet Weather Flow (PWWF) of a 10 year 24-hour peak storm, potentially requiring capacity improvements and the installation of wet weather storage. The potential impacts of the proposed TOD #2 project related to current exceedance of PWWF storage capacity at the WPCP will be addressed in the Collection System discussion below.

Therefore, because the proposed TOD #2 project would not result in the determination by the wastewater treatment provider that it does not have adequate treatment capacity to serve the proposed TOD #2 project’s projected demand in addition to the provider’s existing commitments, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

### *Collection System*

The additional sanitary flows from the proposed TOD #2 project will affect the already limited capacity of sewer pipes adjacent to the TOD #2 project site. The Millbrae CIP for the Sewer Collection System does not specifically address funding the needed additional sewer capacity and/or reduced RDII for the sewer collection system,

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including the additional needs of the proposed TOD #2 project. The inability of the existing sanitary sewer system to accommodate the increased flows associated with the proposed TOD #2 project, combined with a high rate of inflow and infiltration, will require funding and implementation of collection system infrastructure improvements and/or reductions in inflow and infiltration during PWWF (i.e. RDII); thus, impacts would be *significant*.

**Impact UTIL-TOD#2-6:** The proposed TOD #2 project would adversely affect the already limited capacity of sewer pipes adjacent to the TOD #2 project site.

**Mitigation Measure UTIL-TOD#2-6.** Prior to the issuance of building permits, the proposed TOD #2 project applicant, in coordination with the City, shall engineer, design and pay their fair share of the capital improvements required to increase capacity and/or reduce RDII for the sewer collection and treatment system, based on hydraulic studies and agreements forthcoming by the applicant, prior to City approval of the project building permits.

**Significance With Mitigation:** Less than significant.

### 4.14.2.4 CUMULATIVE IMPACTS

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UTIL-7	The proposed Project, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to wastewater.
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This section analyzes potential impacts related to wastewater treatment that could occur from the proposed Project in combination with reasonably foreseeable growth within the WPCP service area.

#### Treatment System

Buildout of the Specific Plan Update would generate 0.89 MGD of wastewater delivered for treatment at the WPCP. This increase does not exceed the available treatment capacity at the WPCP,<sup>42</sup> and it would occur incrementally over a period of 25 years. The WPCP serving the proposed Project currently uses less than half of its design and permitted average dry weather wastewater treatment capacity. Based on the recent trends of diminishing water demand, and therefore wastewater treatment demand, and the projected wastewater demand in the service area, cumulative wastewater treatment demand over the proposed Project buildout period is below the excess capacity of the WPCP.<sup>43</sup>

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<sup>42</sup> The average dry weather flow rate from 2008 to 2012 was 1.3 mgd and the permitted capacity of the plant is 3.0 mgd resulting in 1.7 mgd excess capacity. Thus, in the near term, the buildout of the Specific Plan Update would not exceed the capacity of the WPCP (1.3 mgd + 0.89 mgd = 2.19 mgd; 2.19 mgd < 3.0 mgd), based on the WPCP dry weather capacity values reported by the RWQCB.

<sup>43</sup> The Millbrae 2010 UWMP estimated future (2035) flows to be treated of approximately 2.21 mgd. This includes approximately 0.66 mgd increase from full buildout of the proposed redevelopment projects in the City, including the MSASP; as well as conservation measures that the City is implementing. The conservatively estimated wastewater generation rate for total buildout of

Wastewater from cumulative projects would be treated according to the wastewater treatment requirements documented in the NPDES permit for the WPCP, and enforced by the San Francisco Bay RWQCB.

Because the cumulative demand would not substantially impact the existing capacity of the wastewater treatment system, which has sufficient capacity for wastewater that would be produced by the proposed Project, construction of new wastewater treatment facilities would not be necessary.

## Collection System

The existing collection system adjacent to the Specific Plan Area has limited capacity to accommodate additional peak sanitary flows. The system also has a high rate of inflow and infiltration. Therefore, collection system infrastructure improvements (i.e. capacity increases and/or RDII reduction) will be required by applicants/developers of proposed new projects with substantial sewer generation, as required policies in the Specific Plan Update.

Future development in the WPCP service area would be subject to the development review process and would be required to mitigate any effects to wastewater collection services on a project-by-project basis. Future development would also be required to comply with all applicable regulations and ordinances protecting wastewater treatment services as described in Section 4.14.2.1 Environmental Setting.

Therefore, with implementation of Mitigation Measure UTIL-TOD#1-6 cumulative development combined with the proposed Specific Plan Update would not exceed wastewater collection and treatment requirements, and cumulative impacts to sanitary wastewater service would be *less than significant*.

**Significance With Mitigation:** Less than significant.

## 4.14.3 SOLID WASTE

This section outlines the regulatory setting, describes existing conditions, and discusses potential impacts from buildout of the Specific Plan Update and development of the proposed TOD #1 and TOD #2 projects with regard to solid waste disposal services.

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the Specific Plan Update area is 0.89 mgd, less the 0.66 mgd already accounted for in the UWMP estimate for 2035, yields a net increase of 0.23 mgd. Adding 0.23 to 2.21 yields 2.44 mgd, which is below the permitted dry weather flow capacity of 3.0 mgd.

## UTILITIES AND SERVICE SYSTEMS

### 4.14.3.1 ENVIRONMENTAL SETTING

#### Regulatory Framework

##### *State Regulations*

##### California Integrated Waste Management Act

California's Integrated Waste Management Act of 1989, Assembly Bill 939 (AB 939), subsequently amended by Senate Bill 1016 (SB 1016), set a requirement for cities and counties throughout the State to divert 50 percent of all solid waste from landfills by January 1, 2000 through source reduction, recycling, and composting. To help achieve this, the Act required that each city and county prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of on-going landfill capacity.

As part of the California Integrated Waste Management Board's (CIWMB's) Zero Waste Campaign, regulations affect what common household items can be placed in the trash. As of February 2006, household materials including fluorescent lamps and tubes, batteries, electronic devices, and thermostats that contain mercury are no longer permitted in the trash.<sup>44</sup>

In 2007, SB 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on two factors: a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. The California Integrated Waste Management Board was replaced by the California Department of Resources Recycling and Recovery (CalRecycle) in 2010. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate. In 2013, the statewide residential per capita disposal rate was 4.4 pounds per resident per day, and the statewide employee per capita disposal rate was 10.2 pound per employee per day.<sup>45</sup>

##### Assembly Bill 341

In 2011, AB 341 was passed that sets a State policy goal of not less than 75 percent of solid waste that is generated to be source reduced, recycled, or composted by the year 2020. CalRecycle was required to submit a report to the legislature by January 1, 2014 outlining the strategy that will be used to achieve this policy goal. This bill affects local governments in that each jurisdiction is required to implement a commercial solid waste recycling program that consists of education, outreach and monitoring of businesses. An annual report of the progress of such efforts is required by the law. CalRecycle is responsible for reviewing each jurisdiction's commercial recycling program.

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<sup>44</sup> California Department of Resources, Recycling, and Recovery (Cal Recycle), <http://www.calrecycle.ca.gov/homehazwaste>, accessed on February 26, 2015.

<sup>45</sup> CalRecycle, California's Statewide Per Resident, Per Employee, and Total Disposal Since 1989, [www.calrecycle.ca.gov/lgcentral/GoalMeasure/DisposalRate/Graphs/Disposal.htm](http://www.calrecycle.ca.gov/lgcentral/GoalMeasure/DisposalRate/Graphs/Disposal.htm) , accessed on February 26, 2015.

## UTILITIES AND SERVICE SYSTEMS

### California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act requires areas in development projects to be set aside for collecting and loading recyclable materials. The Act requires CalRecycle (formerly CIWMB) to develop a model ordinance for adoption by any local agency relating to adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model, or an ordinance of their own, providing for adequate areas in development projects for the collection and loading of recyclable materials.

### Global Warming Solutions Act of 2006, Scoping Plan<sup>46</sup>

The California Global Warming Solutions Act of 2006 (also known as AB 32) Scoping Plan, which was adopted by the Air Resources Board (ARB), included a Mandatory Commercial Recycling Measure. The Mandatory Commercial Recycling Measure focuses on diverting commercial waste as a means to reduce greenhouse gas (GHG) emissions, with the goal of reducing GHG emissions by 5 million metric tons of carbon dioxide equivalents (MTCO2e), consistent with the 2020 targets set by AB 32. To achieve the Measure's objective, the commercial sector will need to recycle an additional 2 to 3 million tons of materials annually by the year 2020.

CalRecycle adopted this Measure at its January 17, 2012 Monthly Public Meeting. The regulation was approved by the Office of Administrative Law on May 7, 2012 and became effective immediately. On June 27, 2012, the Governor signed SB 1018, which included an amendment requiring both businesses that generate 4 cubic yards or more of commercial solid waste per week and multi-family residences with five or more units to arrange for recycling services. This requirement became effective on July 1, 2012.

### CAL Green Building Code

As previously stated in Section 4.14.1.1 under "Regulatory Framework," the purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices related to material conservation and resource efficiency. The provisions of this code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in this code, throughout the State of California.

Section 4.408, Construction Waste Reduction Disposal and Recycling, mandates that, in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. CalGreen requires the Applicant to have a Waste Management Plan, for on-site sorting or construction debris, which is submitted to the City for approval.

The Waste Management Plan does the following:

- Identifies the materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
- Specifies if materials will be sorted on-site or mixed for transportation to a diversion facility.

<sup>46</sup> CalRecycle, <http://www.calrecycle.ca.gov/Recycle/Commercial/>, accessed on February 26, 2015.

## UTILITIES AND SERVICE SYSTEMS

- Identifies the diversion facility where the material collected can be taken.
- Identifies construction methods employed to reduce the amount of waste generated.
- Specifies that the amount of materials diverted shall be calculated by weight or volume, but not by both

### *Local Regulations*

#### Millbrae 1998-2015 General Plan

The City of Millbrae General Plan outlines various goals, policies and implementing programs relevant to solid waste disposal services in the Land Use Element. The policies relevant to the proposed Project are listed in Table 4.14-20.

**TABLE 4.14-20 GENERAL PLAN POLICIES PERTAINING TO SOLID WASTE DISPOSAL SERVICES**

Number	Policy
Land Use (LU) Element	
LU5.1	<b>Adequacy of Public Infrastructure and Services.</b> Ensure that new and existing developments can be adequately served by municipal services and "facilities in accordance with City standards. New projects which require construction or expansion of public improvements shall pay their fair share of the costs necessary to improve or expand infrastructure to serve them, including street improvements, parks, water storage tanks, sewer and water service, and other public services.
LU5.4	<b>Capital Improvement Program (CIP).</b> Continue to maintain a multi-year Capital Improvement Program (CIP) supporting policies in the General Plan to maintain, improve or expand Citywide facilities and infrastructure.
LU5.5	<b>Adequate Utility Infrastructure.</b> Provide safe, reliable, and adequate utility infrastructure to meet the City's new and existing needs and to comply with applicable state, regional, and federal regulations, including: (1) water supply for existing and new normal and emergency needs; (2) sanitary sewer collection; (3) wastewater treatment and disposal; and (4) stormwater collection as necessary to provide adequate drainage and flood protection during periods of high rain and high tides.
LU5.11	<b>Integrated Waste Management.</b> Continue to manage the existing contract with South San Francisco City. Scavengers to provide quality and cost effective solid waste removal throughout the city. Continue working to develop and implement an integrated waste management plan to meet the requirements of the California Integrated waste Management Act (AB 939). Reduce the waste stream as required by State law.

Source: City of Millbrae General Plan 1998-2015, adopted 1998.

#### Millbrae Municipal Code

The City of Millbrae Municipal Code contains all ordinances for the city. The Municipal Code is organized by Title, Chapter, and Section. The current Municipal Code is up to date through Ordinance 747, passed May 27, 2014. The following provisions Title 6, Sanitation and Health, Title 9, Building Regulations, and Title 11, Franchises, of the Municipal Code help to minimize adverse effects to solid waste disposal services as a result of development in Millbrae:

- Chapter 6.05 Single Use Carry-Out Bag Regulations.** The purpose of this chapter is to regulate when and how retail establishments shall provide a single-use carryout bag to a customer, at the check stand, cash

register, point of sale or other point of departure for the purpose of transporting food or merchandise out of the establishment in the city. Single use bags shall not be provided except as provided in this section starting on September 1, 2012.

- **Chapter 6.15 Garbage.** The purpose of this chapter is to regulate the disposition and disposal of garbage and waste matter in the city. It affects business, residences and construction sites.
- **Chapter 6.20 Municipal Services.** This chapter includes the regulations for the provision of municipal services, including collection of garbage and rubbish, and water and sewer services.
- **Chapter 6.30 Recyclable Materials.** This chapter includes the regulations for the recycling of materials in the city. It affects businesses, residences and construction sites.
- **Chapter 6.40 Sustainable Food Service Ware.** This chapter includes the regulations for the required use of biodegradable or otherwise “sustainable” disposable food service ware.
- **Chapter 9.35 California Green Building Code.** The purpose of this chapter is to adopt CalGreen. The City adopted the CalGreen per Section 9.35.010.
- **Chapter 11.05 Electrical Transmission Franchise.** This chapter establishes terms for Pacific Gas and Electric Company (PG&E), the electrical franchise serving the city, to construct, maintain and use poles, wires, conduits and appurtenances, including communication circuits, necessary or proper for transmitting and distributing electricity to the public for any and all purposes, in, along, across, upon, under and over the public streets, ways and places within the city.
- **Chapter 11.10 Gas Distribution Franchise.** This chapter establishes terms for PG&E, the gas franchise serving the city, to install, maintain and use in the streets of the city all pipes and appurtenances for transmitting and distributing gas to the public for any and all purposes.

## Existing Conditions

South San Francisco Scavenger Company collects solid waste under franchise with the City. Millbrae's solid waste is processed at a transfer station at Oyster Point in South San Francisco, and from there is transported primarily to the Ox Mountain sanitary landfill site in Half Moon Bay. Millbrae residents participate in curbside recycling program for paper, aluminum, glass and plastic. The City operates a Source Reduction and Recycling program designed to meet state law requiring a 50 percent reduction of waste to landfills.

CalRecycle reports that in 2013 a total of 12,949.32 tons of solid waste from Millbrae was disposed at 10 different landfills.<sup>47</sup> Ninety-nine percent (99 percent; 12,813 tons) of Millbrae's solid waste in 2013 went to one of those facilities: the Ox Mountain Sanitary Landfill (also known as Corinda Los Trancos Landfill), in Half Moon Bay, California.

The three landfills receiving the second, third and fourth largest amount of solid waste from Millbrae in 2013 were:

- Recology Hay Road Landfill (54 tons);
- Monterey Peninsula Landfill (40 tons); and

<sup>47</sup> CalRecycle Jurisdiction Disposal by Facility, [www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=OriginJurisdictionIDs%3d305%26ReportYear%3d2013%26ReportName%3dReportEDRSJurisDisposalByFacility](http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=OriginJurisdictionIDs%3d305%26ReportYear%3d2013%26ReportName%3dReportEDRSJurisDisposalByFacility), accessed on July 31, 2014.

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- Potrero Hills Landfill (9 tons).

### Ox Mountain Landfill

The Ox Mountain Landfill is a sanitary landfill located in Half Moon Bay, California, with a mailing address of Browning Ferris Industries of CA, Inc., Corrinda Los Trancos Landfill, 12310 San Mateo Road (Hwy 92). It has a permitted throughput capacity of 3,598 tons per day. Its remaining permitted capacity is 26,898,089 cubic yards. Its estimated closure year is 2023.<sup>48</sup>

### Recology Hay Road Landfill

The Recology Hay Road Sanitary Landfill is located in Vacaville, California, with a mailing address of Recology Hay Road Landfill, 6426 Hay Road. It has a permitted throughput capacity is 2,400 tons per day. Its remaining permitted capacity is 30,433,000 cubic yards. It has an estimated “cease operation date” of 2077.<sup>49</sup>

### Monterey Peninsula Landfill

The Monterey Peninsula Landfill is located in Marina, California, with a mailing address of 14201 Del Monte Boulevard. It has a permitted throughput capacity of 3,500 tons/day. Its remaining permitted capacity is 48,560.000 cubic yards. It has an estimated “cease operation date” of February 28, 2107.<sup>50</sup>

### Potrero Hills Landfill

The Potrero Hills Landfill is a Class III facility located in Suisun, California, with a mailing address of 3675 Potrero Hills Lane. It has a permitted throughput capacity of 4,330 tons/day. It has a maximum permitted capacity of 83,100,000 cubic yards. It has an estimated closure date of February 18, 2048.<sup>51</sup>

### 4.14.3.2 STANDARDS OF SIGNIFICANCE

The proposed Project would have a significant impact on solid waste disposal if it would:

1. Not be served by a landfill with sufficient permitted capacity to accommodate the proposed Project’s solid waste disposal needs.
2. Be out of compliance with federal, State, and local statutes and regulations related to solid waste.

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<sup>48</sup> CalRecycle, “Facility Site summary Details: (41-AA-0002)” <http://www.calrecycle.ca.gov/SWFacilities/Directory/41-AA-0002/Detail/> accessed on February 26, 2015.

<sup>49</sup> CalRecycle, “Facility Site summary Details: (48-AA-0002)” <http://www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0002/Detail/>, accessed on February 26, 2015.

<sup>50</sup> CalRecycle, “Facility Site summary Details: (27-AA-0010)” <http://www.calrecycle.ca.gov/SWFacilities/Directory/27-AA-0010/Detail/>, accessed on February 26, 2015.

<sup>51</sup>CalRecycle, “Facility Site summary Details: (48-AA-0075) <http://www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0075/Detail/>, accessed February 26, 2015.

## UTILITIES AND SERVICE SYSTEMS

### 4.14.3.3 IMPACT DISCUSSION

UTIL-8	The proposed Project would be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs.
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#### Specific Plan Update

In 2013, CalRecycle reported that while the overall total of 12,949 tons of solid waste from Millbrae was disposed at 10 different landfills, the majority (99 percent or 12,813 tons) went to one landfill (Ox Mountain Sanitary Landfill). Three other landfills received most of the remaining one percent. Table 4.14-21 compares the maximum daily capacity and estimated closure date for each of the four facilities.

TABLE 4.14-21 LANDFILLS' EXISTING DAILY CAPACITY AND ESTIMATED CLOSURE DATE

Landfill Facility	Daily Capacity (tons/day)	Estimated Closure Year
Ox Mountain Landfill	3,598	2023
Recology Landfill	2,400	2077
Monterey Peninsula Landfill	3,500	2107
Potrero Hills Landfill	4,330	2048

Source: CalRecycle Facility Site summary Details: (48-AA-0075) <http://www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0075/Detail/>.

The City's disposal rate per resident in 2011 was 3.5 pounds of solid waste per person per day (ppd), which was below the CalRecycle target of 5.3 ppd per resident. The disposal rate per business employee in the city in 2011 was 16.3 ppd, which was below the CalRecycle target rate of 22.8 ppd per employee.<sup>52</sup> CalRecycle also reports the City's per capita disposal rates in 2012 and 2013 were 3.5 and 3.2 ppd, respectively, for residents and 16.9 and 15.2 ppd, respectively, for employees; however these 2012 and 2013 data are still awaiting review by the agency.<sup>53</sup> The City's disposal rates for both residents and employees have been below target rates since 2007.<sup>54</sup>

<sup>52</sup> CalRecycle, Jurisdiction Diversion Post 2006, <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx>, accessed February 26, 2015.

<sup>53</sup> According to the CalRecycle web site, "Awaiting Review" means "The Department has not completed its analysis, or approved the per capita disposal figures or program implementation for the years included in this review cycle." <http://www.calrecycle.ca.gov/LGCentral/DataTools/Reports/BRDefine.htm#Annual>, accessed October 4, 2014.

<sup>54</sup> The per capita disposal rate target is also known as "the 50 percent equivalent per capita disposal target." It is the amount of disposal Millbrae would have had during the 2003 – 2006 base period (designated by CalRecycle) if it had been exactly at a 50 percent diversion rate. It is calculated by CalRecycle using the average base period per capita generation for Millbrae (in pounds), then dividing this generation average in half to determine the 50 percent equivalent per capita disposal target. The target is an indicator for comparison with that jurisdiction's annual per capita per day disposal rate beginning with the 2007 program year.

## UTILITIES AND SERVICE SYSTEMS

The proposed Specific Plan Update at buildout would generate 4,640 residents and 7,600 employees. For analysis purposes, solid waste generation is assumed to be the actual 2011 per capita generation rates of 3.5 ppd for residents and 16.3 ppd for employees. Accordingly, the total solid waste generated by the Project's residents and employees is estimated to be 140,120 ppd, or 70 tons per day.<sup>55</sup>

The total estimated solid waste generation rate for the Specific Plan Update of 70 tons per day is less than two percent of the daily capacity (i.e. 3,598 tons/day) of the Ox Mountain landfill providing disposal services to the city. The solid waste from generated from buildout of the Specific Plan Update is also less than three percent of the permitted daily capacity of the landfill with the smallest daily capacity (i.e. 2,400 tons/day) of any of the four landfills shown on Table 4.14-21. As such, buildout of the Specific Plan Update would have a *less-than-significant* impact with regard to daily capacity at each of the landfill facilities.

One of the four landfills that receive the majority of the City's solid waste is likely to reach its permitted maximum capacity in 2023, as shown in the Table 4.14-21. However, the other three landfills are not estimated to close until 2048 (Potrero Hills Landfill), 2077 (Recology Landfill) and 2107 (Monterey Peninsula Landfill), respectively. In addition, there are 10 landfills that received waste from the Millbrae in 2013. If one or more of the four landfills on Table 4.14-21 were unavailable in the future, it is likely Millbrae's solid waste volume could be increased at one or more of the other landfills that already serve Millbrae.

Additionally, future development would be required to comply with the CBC Section 4.408, which requires a minimum of 50 percent of non-hazardous construction and demolition debris to be recycled or salvaged. Per Section 4.408, the project applicant's under the Specific Plan Update would be required to prepare a Waste Management Plan, for on-site sorting of construction debris, which is submitted to the City for approval, in order to ensure that the covered project meets the diversion requirement for reused or recycled C&D debris.

With continued compliance with applicable regulations listed below, solid waste generated from the buildout of the Specific Plan Update would not exceed the landfill capacity available to the city. Therefore, the proposed Project would be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs, resulting in a *less-than-significant* impact.

### Applicable Regulations:

- California Integrated Waste Management Act
- Global Warming Solutions Act of 2006, Scoping Plan
- CAL Green Building Code
- City of Millbrae Municipal Code – Chapter 6.05, Single Use Carry-Out Bag Regulations; Chapter 6.30, Recyclable Materials; Chapter 6.40, Sustainable Food Service Ware.
- City of Millbrae General Plan – LUIP 5.11, Integrated Waste Management.

**Significance Without Mitigation:** Less than significant.

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<sup>55</sup> 4,640 x 3.5 = 16,240 pounds, plus 8,090 x 16.3 = 123,880 pounds; totaling 140,120 pounds per day, or 70 tons per day.

## TOD #1 Project

As described in Chapter 3, Project Description, of this Draft EIR, construction of the proposed TOD #1 project would generate 500 new housing units, 32,000 square feet of retail space, and 267,000 square feet of office space. This would result in 1,325 residents and 1,148 jobs.<sup>56</sup> For analysis purposes, solid waste generation is assumed to be the actual 2011 per capita generation rates of 3.5 ppd for residents and 16.3 ppd for employees. Accordingly, the total amount of solid waste generated by the proposed TOD # 1 project's residents and employees is estimated to be 23,349 pounds per day, or 11.7 tons per day.<sup>57</sup>

The total estimated solid waste generation rate for the proposed TOD #1 project of 11.7 tons per day is less than one percent of the daily capacity of the Ox Mountain landfill, or any of the other primary landfills providing disposal services to the city, as shown in Table 4.14-21. As such, the proposed TOD # 1 project would have a *less-than-significant* impact with regard to daily capacity at each of the landfill facilities.

One of the four landfills that receive the majority of the city's solid waste is likely to reach its permitted maximum capacity in 2023, as shown in the Table 4.14-21. However, the other three landfills are not estimated to close until 2048 (Potrero Hills Landfill), 2077 (Recology Landfill) and 2107 (Monterey Peninsula Landfill). In addition, there are 10 landfills that received waste from the city in 2013. If one or more of the four landfills on Table 4.14-21 were unavailable in the future, it is likely the city's solid waste volume could be increased at one or more of the other landfills that already serve the city.

Additionally, the project applicant would be required to comply with the CBC Section 4.408, which requires a minimum of 50 percent of non-hazardous construction and demolition debris to be recycled or salvaged. Per Section 4.408, the project applicant would be required to prepare a Waste Management Plan, for on-site sorting of construction debris, which is submitted to the City for approval, in order to ensure that the covered project meets the diversion requirement for reused or recycled C&D debris.

With continued compliance with applicable regulations listed above, solid waste generated from the proposed TOD #1 project would not exceed the landfill capacity available to the city. Therefore, the proposed TOD #1 project would be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

## TOD #2 Project

As described in Chapter 3, Project Description, of this Draft EIR, construction of the proposed TOD #2 project would generate 321 new housing units, 116 hotel rooms, 46,935 square feet of retail space, and 164,535 square feet of office space. This would result in 851 permanent residents, 232 temporary hotel guests (at capacity) and 868 new jobs. For analysis purposes, solid waste generation is assumed to be the actual 2011 per capita generation rates

<sup>56</sup> See Table 3-1 in Chapter 3, Project Description, for details on population and employment generation.

<sup>57</sup> 1,325 x 3.5 = 4,637 pounds, plus 1,148 x 16.3 = 18,712 pounds; totaling 23,349 pounds per day, or 11.7 tons per day.

## UTILITIES AND SERVICE SYSTEMS

of 3.5 ppd for residents and 16.3 ppd for employees. Accordingly, the total amount of solid waste generated by the proposed TOD # 2 project's residents and employees is estimated to be 17,126 pounds per day, or 8.56 tons per day.<sup>58</sup>

The total estimated solid waste generation rate for the proposed TOD #2 project of 8.56 tons per day is less than one percent of the daily capacity of the Ox Mountain landfill, or any of the other primary landfills providing disposal services to the City, as shown in Table 4.14-21. As such, the proposed TOD #2 project would have a *less-than-significant* impact with regard to daily capacity at each of the landfill facilities.

One of the four landfills that receive the majority of the city's solid waste is likely to reach its permitted maximum capacity in 2023, as shown in the Table 4.14-21. However, the other three landfills are not estimated to close until 2048 (Potrero Hills Landfill), 2077 (Recology Landfill) and 2107 (Monterey Peninsula Landfill). In addition, there are 10 landfills that received waste from the city in 2013. If one or more of the four landfills on Table 4.14-21 were unavailable in the future, it is likely the city's solid waste volume could be increased at one or more of the other landfills that already serve the city.

Additionally, the project applicant would be required to comply with the CBC Section 4.408, which requires a minimum of 50 percent of non-hazardous construction and demolition debris to be recycled or salvaged. Per Section 4.408, the project applicant would be required to prepare a Waste Management Plan, for on-site sorting of construction debris, which is submitted to the City for approval, in order to ensure that the covered project meets the diversion requirement for reused or recycled C&D debris.

With continued compliance with applicable regulations listed above, solid waste generated from the proposed TOD #2 project would not exceed the landfill capacity available to the city. Therefore, the proposed TOD #2 project would be served by a landfill with sufficient permitted capacity to accommodate the proposed TOD #2 project's solid waste disposal needs, resulting in a *less-than-significant* impact.

**Significance Without Mitigation:** Less than significant.

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UTIL-9	The proposed Project would comply with federal, State, and local statutes and regulations related to solid waste.
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## Specific Plan Update

As discussed above, the City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City's per capita disposal rate is below the target rate established by CalRecycle. The City also has established solid waste recycling requirements in its Municipal Code.

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<sup>58</sup> 851 x 3.5 = 2,978 pounds, plus 868 x 16.3 = 14,149 pounds; totaling 17,126 pounds per day, or 8.56 tons per day.

## UTILITIES AND SERVICE SYSTEMS

As shown in Table 4.14-19, the General Plan includes policies and actions that promote recycling, conservation, and help ensure adequate waste collection and disposal facilities are available for the residents and workers of Millbrae. In addition, the Specific Plan Update includes the following policies to minimize solid waste generation for disposal:

### Utilities and Public Services Policies

- P-UTIL 12. Promote recycling of construction and demolition debris.
- P-UTIL 13. Encourage the use of recycled content building materials.

Together these policies and actions help to ensure that the Specific Plan Update is consistent with statutes and regulations related to solid waste.

Therefore, in accordance with the applicable regulations listed below, adoption and implementation of the Specific Plan Update would comply with applicable statutes and regulations related to solid waste, resulting in *no impact*.

### Applicable Regulations:

- California Integrated Waste Management Act
- Global Warming Solutions Act of 2006, *Scoping Plan*
- CAL Green Building Code
- City of Millbrae Municipal Code – Chapter 6.05, Single Use Carry-Out Bag Regulations; Chapter 6.30, Recyclable Materials; Chapter 6.40, Sustainable Food Service Ware.
- City of Millbrae General Plan – LUIP 5.11, Integrated Waste Management.

**Significance Without Mitigation:** No impact.

### TOD #1 Project

The discussion in UTIL-9 under the Specific Plan Update heading above is applicable to the proposed TOD #1 project. Therefore, in accordance with the applicable regulations, policies and actions listed above, development of the proposed TOD #1 project would comply with applicable statutes and regulations related to solid waste, resulting in *no impact*.

**Significance Without Mitigation:** No impact.

### TOD #2 Project

The discussion in UTIL-9 under the Specific Plan Update heading above also is applicable to the proposed TOD #2 project. Therefore, in accordance with the applicable regulations, policies and actions listed above, development of the proposed TOD #2 project would comply with applicable statutes and regulations related to solid waste, resulting in *no impact*.

**Significance Without Mitigation:** No impact.

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## UTILITIES AND SERVICE SYSTEMS

### 4.14.3.4 CUMULATIVE IMPACTS

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UTIL-10	The proposed Project, in combination with past, present, and reasonably foreseeable projects, would not result in less than significant cumulative impacts with respect to solid waste.
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Buildout of the Specific Plan Area will increase the quantity of solid waste for disposal. Although AB 939 established a goal for all California cities to provide at least 15 years of ongoing landfill capacity, growth from other projects within the city, and from other cities in the region, may exceed that which was taken into account when calculating landfill capacity. Also, because one of the four landfill facilities that take approximately 99 percent of the City's solid waste (in 2013) is expected to close 2023, Millbrae or other jurisdictions that use the same facilities may eventually experience insufficient future capacity at a specific landfill to accommodate existing or increased population and employment levels.

Three of the four main landfills serving the city are estimated to close in 2048 (Potrero Hills Landfill), 2077 (Recology Landfill) and 2107 (Monterey Peninsula Landfill), respectively. In addition, there are 10 landfills that received waste from Millbrae in 2013. If one or more of the main four landfills serving Millbrae in 2013 were unavailable in the future, it is likely Millbrae's solid waste volume could be increased at one or more of the other landfills that already serve the city.

As shown in Chapter 4.11, Population and Housing, of this Draft EIR, projected growth in Millbrae with buildout of the proposed Project would be consistent with the regional planning objectives established for the Bay Area. Further, this additional growth would come incrementally over a period of approximately 25 years and a policy framework is in place to ensure adequate planning occurs to accommodate it. Therefore, considering that the amount of growth anticipated would not exceed ABAG projections and that the anticipated growth was adequately planned for in the City's Housing Element, the proposed Project would not induce substantial unexpected population growth, or growth for which inadequate planning has occurred – including planning with respect to solid waste – and a less-than-significant impact would result in this respect.

Therefore, with continued compliance with the applicable regulations listed below, the solid waste related impact of the proposed Project, in combination with past, present and reasonably foreseeable development, would be *less than significant*.

#### Applicable Regulations:

- California Integrated Waste Management Act
- Global Warming Solutions Act of 2006, Scoping Plan
- CAL Green Building Code
- City of Millbrae Municipal Code – Chapter 6.05, Single Use Carry-Out Bag Regulations; Chapter 6.30, Recyclable Materials; Chapter 6.40, Sustainable Food Service Ware.
- City of Millbrae General Plan – LUIP 5.11, Integrated Waste Management.

**Significance Without Mitigation:** Less than significant.

## 4.14.4 ENERGY CONSERVATION

In order to assure that energy implications are considered in project decisions, the State CEQA Guidelines (Appendix F) requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. This section outlines the regulatory setting, describes existing conditions, and discusses potential impacts from buildout of the Specific Plan Update and development of the proposed TOD #1 and TOD #2 projects with regard to energy conservation.

### 4.14.4.1 ENVIRONMENTAL SETTING

This section provides a general description of the regulatory setting addressing existing electric and natural gas services and infrastructure, and supply and demand in Millbrae.

#### Regulatory Framework

##### *Federal Regulations*

##### Energy Independence and Security Act of 2007

Signed into law in December 2007, this Act is an energy policy law that contains provisions designed to increase energy efficiency and the availability of renewable energy. The Act contains provisions for increasing fuel economy standards for cars and light trucks, while establishing new minimum efficiency standards for lighting as well as residential and commercial appliance equipment.

##### Energy Policy Act of 2005

Passed by Congress in July 2005, the Energy Policy Act includes a comprehensive set of provisions to address energy issues. The Act includes tax incentives for the following: energy conservation improvements in commercial and residential buildings; fossil fuel production and clean coal facilities; and construction and operation of nuclear power plants, among other things. Subsidies are also included for geothermal, wind energy, and other alternative energy producers.

##### National Energy Policy

Established in 2001 by the National Energy Policy Development Group, this policy is designed to help the private sector and state and local governments promote dependable, affordable, and environmentally sound production and distribution of energy for the future. Key issues addressed by the energy policy are energy conservation, repair and expansion of energy infrastructure, and ways of increasing energy supplies while protecting the environment.

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### *State Regulations*

#### California Public Utilities Commission

In September 2008, the California Public Utilities Commission (CPUC) adopted the *Long Term Energy Efficiency Strategic Plan*, which provides a framework for energy efficiency in California through the year 2020 and beyond. It articulates a long-term vision, as well as goals for each economic sector, identifying specific near-term, mid-term, and long-term strategies to assist in achieving these goals. The *Long Term Energy Efficiency Strategic Plan* sets forth the following four goals, known as Big Bold Energy Efficiency Strategies, to achieve significant reductions in energy demand:

1. All new residential construction in California will be zero net energy by 2020;
2. All new commercial construction in California will be zero net energy by 2030;
3. Heating, Ventilation and Air Conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate; and
4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

With respect to the commercial sector, the *Long Term Energy Efficiency Strategic Plan* notes that commercial buildings, which include schools, hospitals, and public buildings, consume more electricity than any other end-use sector in California. The commercial sector's five billion-plus square feet of space accounts for 38 percent of the state's power use and over 25 percent of natural gas consumption. Lighting, cooling, refrigeration, and ventilation account for 75 percent of all commercial electric use, while space heating, water heating, and cooking account for over 90 percent of gas use. In 2006, schools and colleges were in the top five facility types for electricity and gas consumption, accounting for approximately 10 percent of state's electricity and gas use.

The CPUC and the California Energy Commission (CEC) have adopted the following goals to achieve zero net energy (ZNE) levels by 2030 in the commercial sector:

- Goal 1: New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.
- Goal 2: 50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.
- Goal 3: Transform the commercial lighting market through technological advancement and innovative utility initiatives

#### California Building Code

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2013 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 31, 2012, the CEC adopted the 2013 Building and Energy Efficiency Standards, which went into effect on July 1, 2014.

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Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (non-residential) more energy efficient than those constructed under the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

### CALGreen Building Code

As previously stated in Section 4.14.1.1 under “Regulatory Framework,” the purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices related to energy efficiency. The provisions of this code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in this code, throughout the State of California. Compliance with the CALGreen Code is not a substitution for meeting the certification requirements of any green building program. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

### 2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now widely accepted within the state as “business-as-usual,” they exceed the standards imposed by all other states and they reduce GHG emissions by reducing energy demand.

### State Greenhouse Gas Regulations

The Governor’s GHG Reduction Executive Order S-3-05 was signed on June 1, 2005, and set GHG reduction targets for the State. Soon after, AB 32 was passed by the California state legislature on August 31, 2006, to place the State on a course toward reducing its contribution of GHG emissions. In response to AB 32, the California Air Resources Board (CARB) developed a *Scoping Plan* outlining California’s approach to achieving the goal of reducing GHG emissions to 1990 levels by 2020. The final *Scoping Plan* was adopted by CARB on December 11, 2008. CARB approved the first 5-year *Update to the Climate Change Scoping Plan* on May 22, 2014, as required by AB 32. For a detailed discussion on these regulations, see Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR.

### Senate Bill X1-2

Signed into law in 2011, SB X1-2 directs CPUC’s Renewable Energy Resources Program to increase the amount of electricity generated from eligible renewable energy resources per year to an amount that equals at least 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, 25 percent by December 31, 2016, and 33 percent by December 31, 2020. SB X1-2 codifies the 33 percent by 2020 renewable portfolio standard (RPS) goal established pursuant to the Global Warming Solutions Act of 2006. This new RPS applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must adopt the new RPS goals of 20

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percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement being met by the end of 2020

### *Local Regulations*

#### Millbrae 1998-2015 General Plan

The City of Millbrae General Plan outlines various goals, policies and implementing programs relevant to energy conservation in the Land Use Element and Housing Element. The policies relevant to the proposed Project are listed in Table 4.14-22.

TABLE 4.14-22 GENERAL PLAN POLICIES PERTAINING TO ENERGY CONSERVATION

Number	Policy
<b>Land Use (LU) Element</b>	
LU4.5	<b>Sustainable Millbrae.</b> In order to assure the long-term quality of life in Millbrae, consider the integration of the health of the local economy along with environmental integrity and human well-being when considering future projects.
LU5.15	<b>Electrical, Gas and Telecommunications Services.</b> In coordination with service providers, assure the provision of adequate electrical, gas and telecommunications services throughout the city, and incorporate energy-conserving devices in new development to reduce energy consumption.
<b>Parks, Open Space, and Conservation (PC) Element</b>	
PC6.15	<b>Energy Efficiency:</b> Title 24. Require that all new buildings and additions in the city be in compliance with the energy efficiency standards of Title 24 of the California State Building Code.
PC6.16	<b>Solar Heating and Cooling.</b> Encourage installation of solar panels for heating and cooling with solar energy.
PC6.17	<b>Solar Heating for Pools.</b> Encourage property owners to heat all new and existing spas and swimming pools with solar energy.
PC6.18	<b>Energy Conservation.</b> Promote energy conservation in new and existing development and encourage use of alternative energy sources, including passive heating and cooling, by allowing variances to site or building requirements (i.e. setbacks, lot coverage, building height, etc.) where consistent with public health and safety.
<b>Housing (H) Element</b>	
H2.4	<b>Energy Conservation in New Housing.</b> Promote the use of energy conservation in residential construction by incorporating energy conservation in all new residential development. New homes shall meet State standards for energy conservation.

Source: City of Millbrae General Plan 1998-2015, adopted 1998.

#### Millbrae Municipal Code

The City of Millbrae Municipal Code contains all ordinances for the city. The Municipal Code is organized by Title, Chapter, and Section. The current Municipal Code is up to date through Ordinance 747, passed May 27, 2014. The following provisions of Title 9, Building Regulations, and Title 11, Franchises, of the Municipal Code help to minimize adverse effects to energy conservation as a result of development in Millbrae:

- **Chapter 9.35 California Green Building Code.** The purpose of this chapter is to adopt the California Green Building Code, which establishes the minimum requirements for the effective use of green building in the design of new residential, commercial and industrial buildings and structures and also includes additions and alterations to all existing buildings and structures.
- **Chapter 9.50 Energy Code.** The purpose of this chapter is to adopt the code of rules and regulations known and designated as the California Energy Code, 2013 Edition, with the California State Amendments, hereinafter called the energy code, which establishes the minimum requirements for effective use of energy in the design of new buildings and structures, and additions to existing buildings.
- **Chapter 11.05 Electrical Transmission Franchise.** This chapter establishes terms for the electrical franchise serving the city. The franchise to construct, maintain and use poles, wires, conduits and appurtenances, including communication circuits, necessary or proper for transmitting and distributing electricity to the public for any and all purposes, in, along, across, upon, under and over the public streets, ways and places within said city is granted to PG&E, its successors and assigns.
- **Chapter 11.10 Gas Distribution Franchise.** This chapter establishes terms for the gas distribution franchise serving the city. The franchise to install, maintain and use in the streets of the city all pipes and appurtenances for transmitting and distributing gas to the public for any and all purposes within the city is granted to PG&E, its successors and assigns.

## Existing Setting

PG&E provides electricity and natural gas services to the city. PG&E is a publicly traded utility company which generates, purchases, and transmits energy under contract with the CPUC. PG&E owns and maintains above- and below-ground networks of electric and gas transmission and distribution facilities throughout the city. Both gas and electrical service is available throughout the Specific Plan Area.

PG&E's service territory is 70,000 square miles in area, roughly extending north to south from the City of Eureka to the City of Bakersfield, and east to west from the Sierra Nevada mountain range to the Pacific Ocean.

### *Electricity*

PG&E's total service territory electricity distribution system consists of 141,215 circuit miles of electric distribution lines and 18,616 circuit miles of interconnected transmission lines. PG&E electricity is generated by a combination of sources such as coal-fired power plants, nuclear power plants, and hydro-electric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants or "solar farms." "The Grid," or bulk electric grid, is a network of high-voltage transmission lines that link power plants with the PG&E system. The distribution system, comprised of lower voltage secondary lines, is at the street and neighborhood level, and consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to the individual customer.

PG&E produces or buys its energy from a number of conventional and renewable generating sources, which travel through PG&E's electric transmission and distribution systems. The power mix PG&E provided to customers in 2012 consisted of non-emitting nuclear generation (21 percent), large hydroelectric facilities (11 percent) and eligible renewable resources (19 percent), such as wind, geothermal, biomass, solar and small hydro. The remaining

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portion came from natural gas/other (27 percent) and unspecified power (21 percent). Unspecified power refers to electricity that is not traceable to specific generation sources by any auditable contract trail. In addition, PG&E has plans to increase the use of renewable power. For instance, PG&E purchases power from customers that install small-scale renewable generators (e.g. wind turbines or photovoltaic cells) up to 1.5 megawatts in size. In 2013, PG&E served 23.8 percent of their retail electricity sales with renewable power.<sup>59</sup>

PG&E's projected annual electricity demand growth between 2012 and 2024 is 1.25 percent.<sup>60</sup> Energy providers in the State project demand by assuming future economic growth and taking into account projects such as the Specific Plan Update.

The existing electrical system in the Specific Plan Area consists of overhead and underground facilities. Four sets of 115-kilovolt (kV) electrical transmission lines traverse the eastern portion of the Specific Plan Area in a north-south direction.

### *Natural Gas*

PG&E's natural gas (methane) pipe delivery system includes 42,141 miles of distribution pipelines, and 6,438 miles of transportation pipelines. Gas delivered by PG&E originates in gas fields in California, the US Southwest, US Rocky Mountains, and from Canada. Transportation pipelines send natural gas from fields and storage facilities in large pipes under high pressure. The smaller distribution pipelines deliver gas to individual businesses or residences.

PG&E gas transmission pipeline systems serve approximately 4.2 million gas customers in northern and central California. The system is operated under an inspection and monitoring program. The system operates in real time on a 24-hour basis, and includes leak inspections, surveys, and patrols of the pipelines. A new program, the Pipeline 2020 program, aims to modernize critical pipeline infrastructure, expand the use of automatic or remotely-operated shut-off valves, catalyze development of next-generation inspection technologies, develop industry-leading best practices, and enhance public safety partnerships with local communities, public officials, and first responders.

The PG&E gas transportation pipeline nearest the Project runs along Highway 101 (Bayshore Freeway). From north to south, the line crosses under Highway 101 from the west side to the east side at the northeast corner of Specific Plan Area, and continues along McDonnell road and the north side of the WPCP to Millbrae Avenue and on to Old Bayshore Highway.<sup>61</sup> Distribution gas pipelines are located throughout the city, including the Specific Plan Area.

<sup>59</sup> California Public Utilities Commission (CPUC), 2014. California Renewables Portfolio Standard (RPS), <http://www.cpuc.ca.gov/PUC/energy/Renewables/index.htm>, accessed February 27, 2015.

<sup>60</sup> California Energy Commission (CEC), 2013. California Energy Demand 2014-2024 Preliminary Forecast, CEC-200-2013-004-SD-V2, May 2013.

<sup>61</sup> Pacific Gas & Electric, 2014. Gas Transmission System Map web page, <http://www.pge.com/en/safety/systemworks/gas/transmissionpipelines/index.page>, accessed February 27, 2015.

#### **4.14.4.2 STANDARDS OF SIGNIFICANCE**

Appendix F, Energy Conservation, of the CEQA Guidelines, requires a discussion of the potential energy impacts of proposed projects; however, no specific thresholds of significance for potential energy impacts are suggested in the State CEQA Guidelines or are established by the City. Therefore, this EIR analysis determined that impacts would be significant if the Specific Plan Update, upon buildout, would result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and transmission infrastructure, or capacity enhancing alterations to existing facilities. This parallels the threshold determinations for other utility and service systems under Appendix G of the State CEQA Guidelines. In addition, to further the intent of Appendix F, relevant potential impacts related to energy demand and energy conservation listed in Appendix F are also incorporated in the evaluation of impacts.

Appendix F lists the following impacts to energy conservation that may result from projects:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The Appendix F list of potential energy conservation impacts represents a range of impacts that might be applicable to a range of project types. When assessing the potential impacts of the proposed Project, the analysis included in Section 4.14.4.3 below focuses on discussions related to item numbers 2, 4, 5 and 6 on the list. Focus was placed on these potential impacts because the proposed Project does not represent a unique or energy-intensive use that would be substantially different than other similar development projects.

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### 4.14.4.3 IMPACT DISCUSSION

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UTIL-11	The proposed Project would result in a substantial increase in natural gas and electrical service demands, would use appropriate energy conservation and efficiency measures, and would not require new energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities.
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#### Specific Plan Update

New development under the Specific Plan Update would continue to be served by PG&E in accordance with Millbrae Municipal Code, Chapter 11.05 (Electrical Transmission Franchise) and Chapter 11.10 (Gas Distribution Franchise) as described in Section 4.14.1.1, Environmental Setting, above. New underground electrical and gas lines would be required to replace existing lines when realignment is required under future development. The proposed increase in development would result in a long-term increase in energy demand associated with the operation of lighting and space heating/cooling in the added building space, and vehicle travel. In addition, construction activities associated with development require the use of energy (e.g. electricity and fuel) for various purposes such as the operation of construction equipment and tools, as well as excavation, grading, demolition, and construction vehicle travel.

#### *Construction*

Even with energy saving practices in place (as discussed below), new electrical connections, switches and/or transformers might be required to serve new structures and/or carry additional loads within the Specific Plan Area. Similarly, new gas distribution lines and connections may be necessary. These are anticipated infrastructure improvements and part of the Specific Plan Update. Most of the work would be in existing public rights-of-way or facilities. Although creation of new or re-located gas and electric lines could create short-term construction-related environmental effects (e.g. noise, dust, traffic, temporary service interruption, etc.), the work would be subject to compliance with the City's and PG&E's regulations and standard conditions for new construction related to infrastructure improvements. For example, these regulations and conditions would require gas and electric line construction to include best management practices that require construction areas to minimize dust generation, limit construction noise to daytime hours to limit impacts to sensitive receptors, and use modern equipment to limit emissions. In addition, these types of infrastructure improvements are anticipated as part of the Specific Plan Update. Also, any such work would be subject to compliance with applicable regulations and standard conditions of approval for construction projects, including City permits/review for construction (e.g. grading permits, private development review, encroachment permits, etc.)

Construction vehicles would consume fuel. As discussed in Section 4.6, Greenhouse Gas Emissions, the US EPA adopted the Heavy-Duty National Program to establish fuel efficiency and GHG emission standards in the heavy-duty highway vehicle sector, which includes combination tractors (semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). These standards include targets for gallons of fuel consumed per mile beginning in model year 2014. These standards are being extended through model year 2018 through current rulemaking by the US EPA. While construction activities require a commitment of energy

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sources, these efficiency standards improve energy security and innovation in clean energy technology and further the goal of conserving energy in the context of project development. As a result, construction impacts for future development under the proposed Specific Plan Update would result in a *less-than-significant* impact.

### *Operational*

Implementation of the Specific Plan Update would result in a total buildout of 1,653,340 square feet of office space, 275,110 square feet of retail space, 1,750 residential units, and 370 hotel rooms. The proposed increase in development would result in a long-term increase in energy demand, associated with the operation of lighting and space heating/cooling in the added building space, and vehicle travel. In addition, construction activities associated with development require the use of energy (e.g. electricity and fuel) for various purposes such as the operation of construction equipment and tools, as well as excavation, grading, demolition, and construction vehicle travel.

### Development Energy Impacts

Proposed new development would be constructed using energy efficient modern building materials and construction practices, in accordance with CalGreen Building Code, CPUC's *Long Term Energy Efficiency Strategic Plan* (2008), and the Chapters 9.35 and 9.50 of the City's Municipal Code, which contain the Green Building Ordinance and Energy Code, respectively. The new buildings also would use new modern appliances and equipment, in accordance with the 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). Under these requirements, future development under the Specific Plan Update would use recycled construction materials, environmentally sustainable building materials, building designs that reduce the amount of energy used in building heating and cooling systems as compared to conventionally built structures, and landscaping that incorporates water efficient irrigation systems, all of which would conserve energy.

As an infill development effort, the Specific Plan Update inherently furthers objectives of energy conservation by focusing activities in areas of existing infrastructure and services. Land Use (LU), Urban Design (UD) and Circulation and Parking (CP) policies of the Specific Plan Update that incorporate energy efficiency principles include:

- Land Use Policies
  - P-LU 1. Encourage a rich mix of transit-supportive land uses in the Plan Area in close proximity to one another to encourage transit use, walking, and bicycling.
- Urban Design Policies
  - P-UD 4. Require new development to employ sustainable building and site design principles, such as Leadership in Energy and Environmental Design (LEED), as promulgated by the U.S. Green Building Council, or other acceptable standards. Sustainable building and site design principles include minimizing impervious surfaces, orienting toward solar access, and incorporating energy-efficient elements.
- Circulation and Parking Policies
  - P-CP 1. Provide superior pedestrian access and circulation in the Plan Area, especially to Millbrae Station, by providing sidewalks on both sides of all roadways and adding new routes where feasible.
  - P-CP 2. Accommodate projected pedestrian volumes by increasing sidewalk widths to a minimum of 10 feet.

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- P-CP 3. Create a direct pedestrian connection between El Camino Real (including the northbound bus stop on El Camino Real) and the west side Millbrae Station entrance through a pedestrian paseo.
- P-CP 4. Enhance pedestrian safety at signalized intersections with pedestrian countdown signals, signal timing that minimizes pedestrian wait times and provides adequate crossing times (3.5 feet per second), crosswalks at all approaches, continental and/or high-visibility crosswalk striping, corner bulbouts, and perpendicular ADA-standard curb cuts on all corners.
- P-CP 5. Design all streets to provide an attractive pedestrian and visual environment, including by adding pedestrian-scale lighting, benches, and street furniture
- P-CP 6. Improve bicycle access to Millbrae Station and bicycle connections among the surrounding Plan Area land uses through a system of on-street and off-street bicycle facilities including Class I bicycle paths and Class II bicycle lanes
- P-CP 7. Increase bicycle visibility to other road users through enhanced treatments at intersections, including bicycle signal detection (using bicycle-oriented loop detectors or push buttons) and colored pavement markings
- P-CP 8. Provide secure, short- and long-term bicycle parking facilities at the Millbrae Station and at all developments.
- P-CP 9. Provide wayfinding signage in the Plan Area for all modes, with emphasis at the nearest entrances and exits, and web-available maps for users, as required in Chapters 6 and 7 of this Specific Plan.
- P-CP 10. Require development projects in the vicinity of the station to provide wayfinding signage along wayfinding paths, which include all streets and paseos within the Plan Area, major intersections, and designated bicycle routes.
- P-CP 19. Establish parking standards that are adequate to serve new development but encourage the use of transit and alternate modes.
- P-CP 21. Design and locate parking facilities to be compatible with adjacent areas and to reinforce the pedestrian environment.
- P-CP 22. Require new developments within the planning area to provide for alternative modes of transportation and to provide support facilities for bicyclists, such as showers and changing areas.
- P-CP 23. Require Plan Area employers to prepare Transportation Demand Management (TDM) Plans that include measures to increase the number of employees walking, biking, using transit, or ridesharing (using carpools and vanpools) as commute modes and to reduce vehicle congestion. Where future projects have the potential to impact facilities under the Congestion Management Plan, the TDM Plan shall meet the current City/County Association of Governments of San Mateo County (C/CAG) requirements to reduce the number of trips on the CMP roadway network be approved by both the City and C/CAG.

In addition, the following Specific Plan Update Utilities and Public Services (UTIL) policies are intended to ensure adequate energy services and energy conservation is practiced in the Specific Plan Area:

- Utilities and Public Services Policies
  - P-UTIL 9. Provide adequate electrical, gas and telecommunications services to support new development;
  - P-UTIL 10. Incorporate energy conserving design and equipment into new development in order to promote energy conservation.

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- P-UTIL 11. Allow co-generation systems utilizing all methods of alternative energy production where feasible.

Also, there are several General Plan policies intended to ensure energy conservation is practiced in Millbrae, as shown above in Table 4.14-22. Specifically, Policy LU4.5 requires the City to consider the integration of the health of the local economy along with environmental integrity and human well-being when considering future projects to assure the long-term quality of life in Millbrae. Policy LU5.15 requires the City to coordinate with service providers, to assure the provision of adequate electrical, gas and telecommunications services throughout the city, and incorporate energy-conserving devices in new development to reduce energy consumption. Policy PC6.15 requires that all new buildings and additions in the city be in compliance with the energy efficiency standards of Title 24 of the California State Building Code and Policy H2.4 requires the use of energy conservation in residential construction by incorporating energy conservation in all new residential development, and that new homes shall meet State standards for energy conservation. Policies PC6.16 and PC6.17 require the City to encourage installation of solar panels for heating and cooling with solar energy, and for property owners to heat all new and existing spas and swimming pools with solar energy.

Therefore, with the implementation of these Specific Plan Update policies and compliance with the General Plan policies and CALGreen Building Code and the other applicable state and local energy efficiency measures, cited above, significant energy conservation and savings would be realized from future development under the Specific Plan Update. Therefore, impacts would be *less than significant* and no mitigation measures are required.

### Transportation Energy Impacts

As an infill development, the Specific Plan Update inherently furthers objectives of energy conservation related to transportation by focusing activities in areas of existing infrastructure and services. Transportation design features that are priorities of the Specific Plan Update include the following: create a Specific Plan-wide pedestrian circulation system; create a Specific Plan-wide bicycle circulation system, including Class I, II, and III bike paths; prioritize intermodal transit connectivity; and facilitate improved connections to transit facilities for bicycles and pedestrians. These elements all promote non-motorized transportation within and to the development, thereby potentially reducing energy consumption that would otherwise be related to motorized vehicle use (i.e. automobiles).

Chapter 4.13, Transportation and Traffic, provides an evaluation of the expected traffic and transit trips generated by the Specific Plan Update. As discussed, the Specific Plan Update would potentially generate an increase in typical weekday trips consisting of vehicular, transit and walk/bike trips that would vary between 2014 and 2040 due to region-wide transportation system improvements that are projected to alter travel patterns and modes of project trips. For example, by 2040, Caltrain is expected to be running trains more frequently, faster, and more efficiently as part of the Caltrain Electrification and Modernization Project, which will increase the transit mode share and decrease the vehicle mode share for project trips.

As discussed above, the US EPA adopted standards that include targets for gallons of fuel consumed per mile beginning in model year 2014. These standards are being extended through model year 2018 through current rulemaking by the US EPA. While future transportation would require a commitment of energy sources, these efficiency standards improve energy security and innovation in clean energy technology further the goal of

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conserving energy in the context of project development. As with impacts of future development discussed above, implementation of Specific Plan Update policies and compliance with General Plan policies listed above, would ensure energy impacts from transportation would be *less than significant*.

### Renewable Energy Impacts

The Specific Plan Area would be within the 70,000-square-mile PG&E service territory for electricity and natural gas generation, transmission and distribution. Due to the Specific Plan Area's size and location within an urban development, buildup of the Specific Plan Update would not significantly increase energy demands within the service territory and would not require new energy supply facilities. Where new transportation/transmission infrastructure is required, as discussed above under Future Construction Energy Impacts, these projects would be subject to separate environmental review and would be required to comply with applicable regulations for construction projects, including construction permits/review for construction within public rights-of-way (e.g. grading permits, private development review, encroachment permits, etc.). In addition, developments such as the proposed Specific Plan Update are anticipated in the energy projections of energy providers within the State. As a result, impacts from new energy supply facilities and transportation/transmission infrastructure, or capacity-enhancing alterations to existing facilities, would be *less than significant* and no mitigation measures are required.

### **Applicable Regulations:**

- National Energy Policy Act of 2005
- California (CEC's) 2006 Appliance Efficiency Regulations
- California Global Warming Solutions Act of 2006, *Scoping Plan*
- CAL Green Building Code
- City of Millbrae Municipal Code, Chapter 9.35, California's Green Building Ordinance; Chapter 9.50, Energy Code; Chapter 11.05, Electrical Transmission Franchise; Chapter 11.10, Gas Distribution Franchise.
- City of Millbrae General Plan –LU4.5, Sustainable Millbrae; LU5.15 Electrical, Gas and Telecommunications Services. PC6.15, Energy Efficiency; PC6.16. Solar Heating and Cooling; PC6.17, Solar Heating for Pools; PC6.18, Energy Conservation; and H2.4, Energy Conservation in New Housing.

**Significance Without Mitigation:** Less than significant.

### **TOD #1 Project**

The impact discussion provided above regarding the Specific Plan Update is also applicable to new development within the TOD #1 project site. As an infill development effort, the proposed TOD #1 project inherently furthers objectives of energy conservation by focusing activities in areas of existing infrastructure and services. The short-term construction-related potential environmental impacts (e.g. noise, air emissions, traffic impacts) from possible new electrical connections/switches/transformers within the project site are not anticipated to be significant and, to the extent they may be necessary, are anticipated infrastructure improvements and part of the project. For example, Serra Avenue and Garden Lane would be removed as part of the proposed TOD #1 project's development and new underground electrical and gas lines would be required to replace existing lines located in these streets. This work would be in existing public rights-of-way or facilities, and would be subject to compliance with applicable regulations and standard conditions of approval for construction projects, including City

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permits/review for construction within public rights-of-way (e.g. grading permits, private development review, encroachment permits, etc.). In addition, an on-site co-generation plant would serve as a central plant to provide hot water and power to all the buildings. Energy related impacts as a result of the proposed TOD #1 project would be *less than significant* and no mitigation measures are required.

**Significance Without Mitigation:** Less than significant.

### TOD #2 Project

The impact discussion provided above regarding the Specific Plan Update is also applicable to new development on the TOD #2 project site. As an infill development effort, the proposed TOD #2 project inherently furthers objectives of energy conservation by focusing activities in areas of existing infrastructure and services. The short-term construction-related potential environmental impacts (e.g. noise, air emissions, traffic impacts) from possible new electrical connections/switches/transformers within the project site are not anticipated to be significant and, to the extent they may be necessary, are anticipated infrastructure improvements and part of the project. When this type of work is required, it would occur in existing public rights-of-way or facilities, and would be subject to compliance with applicable regulations and standard conditions of approval for construction projects, including City permits/review for construction within public rights-of-way (e.g. grading permits, private development review, encroachment permits, etc.). Therefore, energy related impacts as a result of the proposed TOD #2 project would be *less than significant* and no mitigation measures are required.

**Significance Without Mitigation:** Less than significant.

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UTIL-12	The proposed Project, in combination with past, present, and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to energy conservation.
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The discussion under UTIL-11 described the Specific Plan Update's impacts in relationship to the PG&E service territory and therefore includes a discussion of cumulative impacts.

**Significance Without Mitigation:** Less than significant.

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